Result Demonstration/Applied Research Report

STACKED LATE COTTON VARIETY DEMONSTRATION

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SUMMARY

Eleven cotton varieties were compared in strip plots under similar field conditions. Deltapine 455BR, Deltapine 445BR and Deltapine 424DR were the highest yielding varieties. Deltapine 455BR had the highest loan value of 55.25 cents per pound.

PROBLEMS

All 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.

OBJECTIVE

To find a cotton variety that will increase net profit with an increase in yields 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 2 inches of pre-irrigation. The varieties were planted in 6 row plots to a 2X1 pattern on 40" spacing on June 13th. The field had no herbicide applied for weed control. The plots received 5 inches of summer irrigation and 100 units of Nitrogen fertilizer through the season. Five gallons of Phosphoric Acid was also applied through the drip system. No insecticide was applied during the season. Two applications of Mepiquat Chloride of 12 ounces each were made in August. The plots were defoliated with Def® (1pt.) & Prep® (1.5pt.) and desiccated by a freeze. They were stripper harvested on November 28th 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 1155 lb/acre to 1367 lb/acre. The higher yielding varieties were Deltapine 455 BR, Deltapine 424 DR and Deltapine 445 BR. Deltapine 455 BR had the highest loan value of 55.25 cents per pound. Several of the varieties had lower loan rates because of low micronaire.

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

Planted 6-13-05
Harvested 11-28-05

VARIETY	YIELD	% LINT	GRADE	LEAF	STAPLE	MIC	STRENGTH	UNIFORMITY	LOAN VALUE	VALUE/ ACRE
Deltapine 455BR	1367	33.9	31	2	36	3.4	29.7	81.3	55.25	755.27
Deltapine 424DR	1292	29.9	31	2	36	3.2	28.4	82.3	53.30	688.64
Deltapine 445BR	1281	32.9	31	2	37	3.2	30.1	82.2	53.75	688.54
Deltapine 454BR	1251	32.5	31	2	35	3.0	29.6	80.8	52.75	659.90
Phytogen 470WR	1232	30.1	31	1	35	3.4	29.7	82.7	54.70	673.90
Deltapine 444BR	1230	31.6	31	2	36	3.1	29.0	82.4	53.30	655.59
FiberMax 960B2R	1214	29.6	31	2	37	3.1	28.1	80.5	53.50	649.49
Stoneville ST5242BR	1212	34.4	31	2	34	3.6	26.5	82.4	54.05	655.09
Stoneville ST4575BR	1173	32.4	31	2	35	3.4	28.8	82.4	54.20	635.77
Deltapine X04Y170BR	1160	31.3	31	2	37	3.2	29.6	81.9	53.75	623.50
Deltapine 449BR	1155	30.6	31	2	36	3.3	31.2	83.2	54.00	623.70