

312-1150

IRRIGATED COTTON FERTILIZER STUDY - 1950
LYON & HOAG RANCH - FIREBAUGH, CALIFORNIA

John O. Hoyt, Farm Advisor

16
2
320

This is a preliminary report of first picking yields at this test site. Second picking will be accomplished about December 15, or sometime after first frost. A complete yield summary will be available during early January.

The objective of these tests is to determine (1) the effect of various nitrogen rates on cotton yields, (2) the effect of phosphate and potash singly and in combination with nitrogen on the cotton yields, (3) the response of cotton to nitrogen applied prior to and after planting, (4) the effect of various forms of nitrogen fertilizers on cotton yields, (5) the response of cotton to the minor elements zinc, manganese, and copper.

GENERAL DATA:

Soil Type: Panoche Silty Clay Plot Size: 530' x 4 rows
Fertilizer Applied: (a) Prior to preirrigation--broadcast and harvested on March 2, 1950
(b) First crop irrigation--side dressed, 4" x 7", June 8, 1950
Harvest: First picking, IHC Mechanical Cotton Picker, Nov. 15-25, 1950
Crop History: 1949--flax
1948--fallow
1947--flax
1946--fallow
1945--wheat

CALCULATED YIELD, COST, AND RETURN DATA FOR FIRST PICKING:

TREAT- MENT	FERTILIZER/ACRE			AVERAGE YIELD		*GAIN OVER CHECK	**COST OF FERTILIZER	TOTAL INCOME MINUS TREATMENT
	N	P	K	Seed Cotton per Acre	Bale/Acre			
1400	80	0	0	3370	2.46	\$ 92.55	\$ 10.40	\$ 82.15
2660	135	0	0	3617	2.64	129.60	17.55	112.05
31000	199	0	0	3420	2.49	100.05	25.87	74.18
4150	312	0	0	3457	2.52	105.60	40.56	65.04
5	138	172	0	3543	2.59	118.50	33.42	85.08
6	203	254	127	3494	2.55	111.15	51.10	60.05
7	100	0	0	3370	2.46	92.55	13.00	79.55
8	0	231	0	3086	2.25	49.95	20.74	29.21
9	0	0	0	2630	1.92	-----	-----	-----
10	88	0	0	3457	2.52	105.60	11.44	94.16
11	77	0	0	3370	2.46	92.55	10.01	82.54
12	102	0	0	3296	2.40	81.45	13.26	68.19
13	107	0	0	3667	2.68	137.10	13.91	123.19
14	0	0	0	2876	2.10	-----	-----	-----
15		11	0	2926	2.14	25.95	4.22	21.73
16		0	13	3000	2.19	37.05	4.00	33.05
17		0	0	2876	2.10	18.45	3.75	15.00

* Based on lint cotton @ 40¢ per pound

** Based on nitrogen 13¢ per pound

phosphate 9¢ per pound

potash 5¢ per pound

zinc 38¢ per pound

manganese 30.8¢ per pound

copper 30¢ per pound