#139
AGR. NOTES
FEB. 1957

MEAT PRODUCTION ON FERTILIZED IRRIGATED PASTURE

Meat production on fertilized irrigated pasture was compared with that on unfertilized pasture by actual grazing tests at locations in both Merced and Madera counties. The weight gains of steers were used to measure results. The predominate grass in both pastures was Dallas. Ladino clover and Narrowleaf trefoil were present in both pastures. There was some Tall fescue in the Madera pasture and the Merced fields contained some Bermuda and a fairly large percentage of alkali spots. In each trial, both the treated and untreated fields were divided into three sections and grazed in rotation. Both trials received an initial application of nitrogen and phosphorus during the month of May and two subsequent applications of nitrogen at approximately equal intervals during the grazing period. Nearly the same total amounts of nutrients were used in each trial.

RESULTS OF GRAZING FERTILIZER TESTS ON IRRIGATED PASTURE

County	Merced		Madera	
Farm Advisors	Peterson & Stewart		Emrick	
Farm	Kissack		Daulton	
Grazing	5/28 - 10/4/56		5/8 - 11/15/56	
Treatments	Check	5/18 $N_{70}P_{35}$	Check	5/2 $N_{61}P_{40}$
Nutrients per Acre	-	7/12 N_{40}	-	7/6 N_{42}
	-	8/24 N_{60}	-	9/27 N_{42}
Fertilizer cost/acre.	-	$29.50	-	$27.91
Field size	25.6 ac.	32.2 ac.	70 ac.	50 ac.
Grazing & Stocking				
Av. number steers per acre	1.45	2.30	2.63	3.76
Grazing days per acre	191	299	396	582
Average Weight Gains of Steers				
Av. daily gain per animal	1.02 lbs.	1.08 lbs.	.76 lbs. .93	1.05 lbs. 1.18 (through 9/26)
Av. gain per animal	134	140	123	160
Meat produced per acre	194	322	301	610
Evaluation				
Value of meat per acre	$35.00	$58.00	$54.18	$109.80
Value pasture after test	-	6.00**	-	-
Less hay supplement fed/acre	.50	1.50	6.69	10.01
Total income	$34.50	$62.50	$47.49	$ 99.79
Value of increase from fert.	-	28.00	-	52.30
Cost of fertilizer per acre		29.50		27.91
Profit from fertilization		- 1.50		+ 24.39

+ Meat @ 18¢ per lb.
**Pastured 150 cows and 80 calves 10/4 - 10/14 - Valued @ $4.00 per cow month

Both of these trials will be repeated in 1957 and two or three more will be initiated in an effort to determine the possibilities of increasing income per acre from irrigated pasture.

William E. Martin
Les Berry

#119
AGR. NOTES
MAR. 1955

PASTURE MANAGEMENT PAYS

Frank Smith, Shasta County, reports:

"Paul DiSenso of Churn Creek Bottom accumulated a very accurate set of records on irrigated pasture yields during 1954.

A total of 12.35 animal units grazed on 10 acres of pasture from March 13 to December 1. During this period 26 tons of pasture hay were harvested. Converted to total digestible nutrients, the above represents 70,996 TDN.

Hay (8½ ton) and grain (.7 ton) were fed throughout the period. This supplemental feed amounts to 10,023 TDN, which deducted from 70,996 leaves a net of 60,973 TDN which the pasture along produced.

60,973 TDN from 10 acres converts to:

15.24 animal unit months per acre, or
5.72 tons of hay per acre, or
870 pounds of beef per acre, or
7,000 pounds of milk per acre.

Everyone knows production like this doesn't "just happen". Paul made it happen by:

Fertilizing ------ 33 pounds of nitrogen February 21, and 50 pounds of nitrogen on July 4. There was adequate residual phosphorus in the soil.

Irrigating ------- at 7 day intervals during hot weather.

"Strip" grazing -- one day's feed fenced off each day, 28 day recovery period.

Crop rotation ---- this is a two year old pasture."

Victor P. Osterli

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INPUTS AND COSTS IN SUGAR BEET PRODUCTION

Prepared by Jack Hills and Doyle Reed

Some average figures for physical inputs and costs in sugar beet production may be helpful in farm analysis.

Table 1 below gives some estimated physical inputs. In figuring hours of work for the various jobs the amount of work that could be done in a 10-hour day was estimated. The hours per acre were then calculated from this figure. Both figures have been included in table 1 so that you may more readily make comparisons with local data. You may wish to check some of these figures with local farmers or with data you have already collected. We would appreciate your estimate on physical inputs if they differ from ours.

Table 2 has been prepared from the reprints in table 1 using published cost data (see footnote to table 2) and our own estimates where published data were not available.