

Report on 1970  
Western Canada Fertilizer Association  
Demonstration Plots, Yorkton Area

Four barley and one oat strip tests were carried to completion in 1970. The plots were all on stubble with soil tests recommending 30 to 40 pounds of nitrogen. Strips were laid out to compare no fertilizer, adequate phosphate only and adequate phosphate plus 30, 60 and 90 pounds of nitrogen per acre.

Results

The last four columns in Table 1 show the yield increase in bushels per acre over the preceding treatment.

TABLE 1

CROP	LOCATION	TREATMENTS				
		0	P ONLY	P + 30 N	P + 60 N	P + 90 N
BARLEY	SW 26-28-4-2 (MEOTA FSL)	31	0	22.7	5.7	4.2
BARLEY	NE 5-24-1-2 (YCL)	34.4	16.1	5.9	.4	15.8
BARLEY	NE 15-28-2-2 (OL)	24.5	8.0	16.2	9.9	3.1
BARLEY	NW 3-24-32-1 (WHL)	35.1	5.3	2.6	.1	1.3
OATS	NW 23-29-4-2 (YL)	92.1	2.5	14.3	23	29.3

The value of the production due to fertilizer, less the cost of fertilizer, is shown in Table 2. Calculations were based on actual fertilizer cost, barley at 65¢/bushel and oats at 35¢/bushel.

TABLE 2

CROP	LOCATION	P ONLY	P + 30 N	P + 60 N	P + 90 N
BARLEY	SW 26-28-4-2	\$ - 2.50	\$9.39	\$10.22	\$10.08
BARLEY	NE 5-24-1-2	6.97	7.93	5.32	12.07
BARLEY	NE 15-28-2-2	2.20	9.80	13.42	12.57
BARLEY	NW 3-24-32-1	.84	- .47	- 3.41	- 5.50
OATS	NW 23-29-4-2	- 3.12	- 3.31	1.94	9.19

Observations

On barley, the soil test recommendations (P + 30 N) gave a good increase and return above fertilizer cost on three plots and a slight loss on the fourth. Higher rates of N, while they gave worthwhile increases on some plots and rates, were not as consistent as in 1969.

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per J. G. Braidek