

Herbicide Experiments

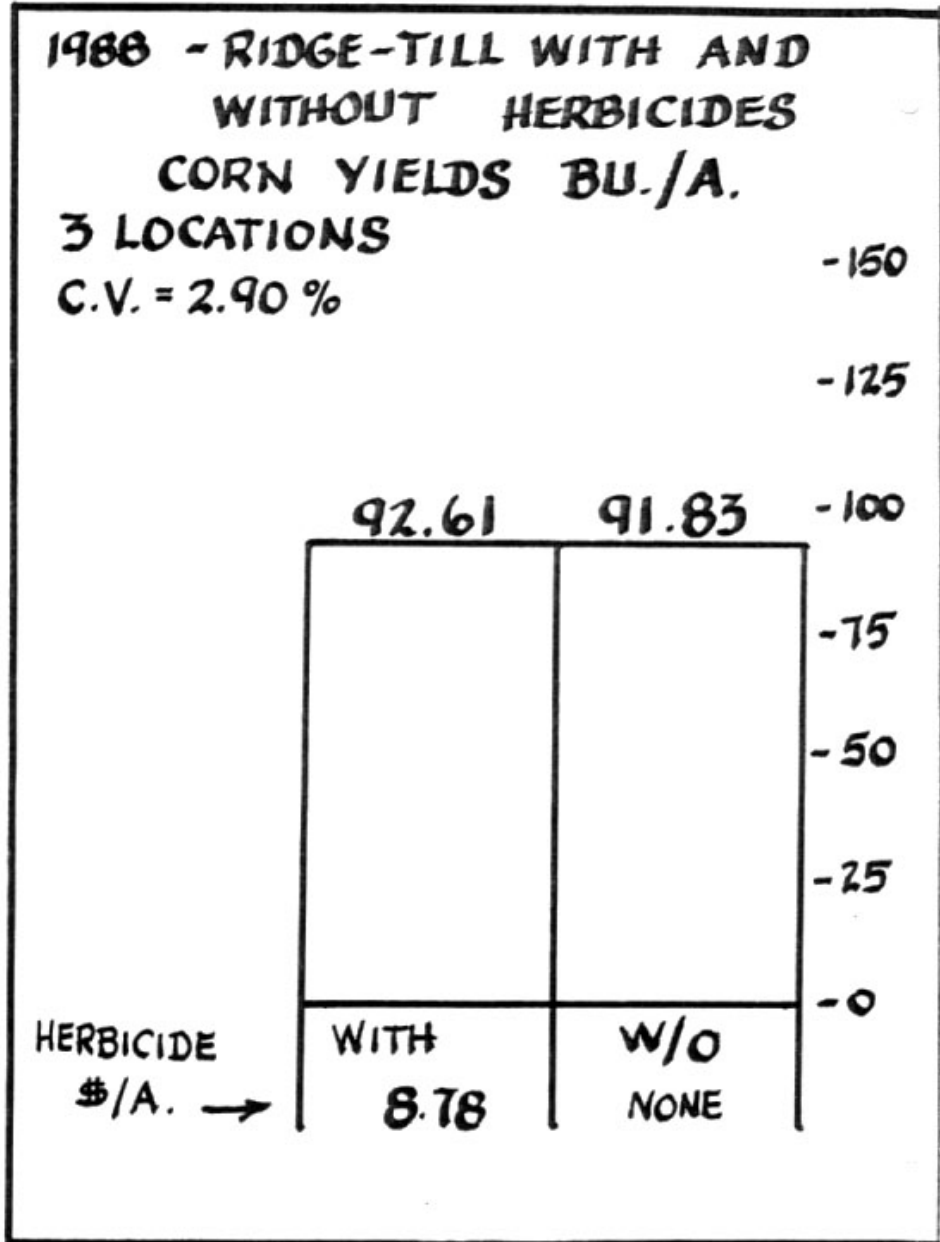
SIDE BY SIDE COMPARISONS OF RIDGE-TILL WITH AND WITHOUT BANDED HERBICIDES SHOWED NO CORN YIELD DIFFERENCES IN ALL THREE LOCATIONS, CHART 7. THE PLOTS WITHOUT HERBICIDES SAVED AN AVERAGE OF \$8.78 PER ACRE IN PRODUCTION COSTS. THE COEFFICIENT OF VARIATION ON THESE TRIALS WAS 2.90%.

THE THREE INDIVIDUAL LOCATION RESULTS ARE LISTED ON CHART 10. THE RIDGE-TILL WITH AND WITHOUT HERBICIDE SOYBEAN TRIALS WERE AT SIX LOCATIONS WITH FIVE TRIALS SHOWING NO YIELD DIFFERENCES BETWEEN WITH OR WITHOUT HERBICIDES.

THE AVERAGE YIELDS WERE 33.70 WITH HERBICIDES AND 32.44 BUSHELS PER ACRE WITHOUT HERBICIDES. THE HANKS TRIAL, CHART 11, HAD A SIGNIFICANT YIELD REDUCTION OF 5.23 BUSHELS PER ACRE WHERE NO HERBICIDES WERE USED. THESE BUSHELS AT \$7.00 PER BUSHEL MORE THAN PAID FOR THE \$24.03 PER ACRE HERBICIDE COST. AVERAGED OVER ALL SIX DEMONSTRATIONS, RIDGE-TILL WITHOUT HERBICIDES RESULTED IN A \$3.06 PER ACRE MORE PROFIT. THE AVERAGE HERBICIDE SAVINGS ON THE CORN AND SOYBEAN PROJECTS TIMES IOWA'S ROW CROP ACRES COULD MEAN A 118.3 MILLION DOLLARS SAVINGS IN OUT OF POCKET EXPENSES, CHART 9. THE ENERGY USED TO PRODUCE THESE HERBICIDES FOR IOWA'S ACRES COULD BE REDUCED BY 18.6 GALLONS OF DIESEL FUEL. IT TAKES 1.08 GALLONS OF DIESEL FUEL TO PRODUCE EACH POUND OF ACTIVE INGREDIENT IN A HERBICIDE.

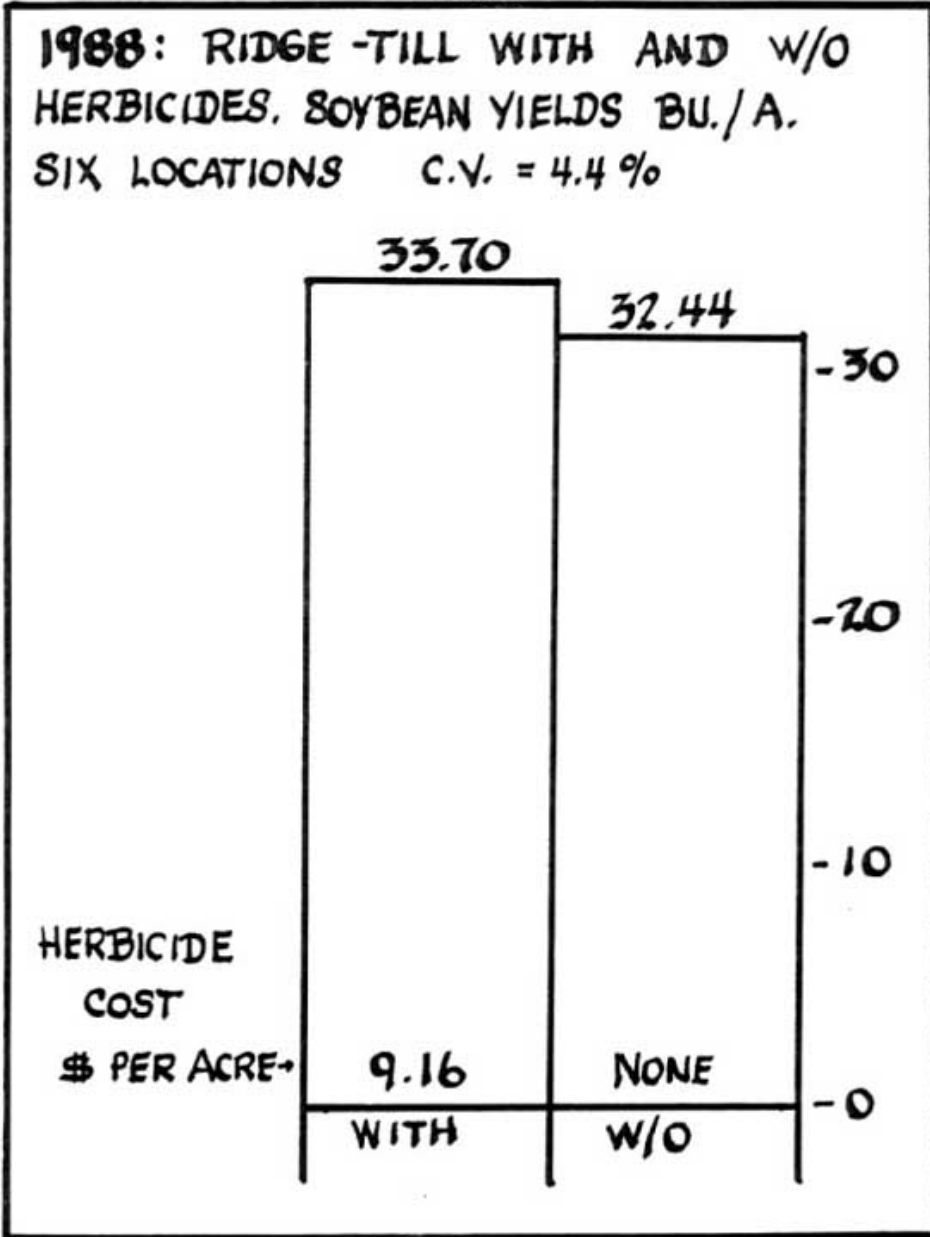
WE CAN HAVE EQUAL YIELDS, SAVE MONEY, SAVE ENERGY AND KEEP THE GROUNDWATER FREE OF HERBICIDES.

CHART -7-



P.F.I.

CHART -8-



P.F.I.

CHART -9-

1988 HERBICIDE EXPERIMENT.**RIDGE-TILL WITH + WITHOUT
HERBICIDES.****THREE CORN TRIALS
SIX SOYBEAN TRIALS
EIGHT LOCATIONS****CORN YIELDS THE SAME -92BU./A.
SOYBEAN YIELDS THE SAME -33BU./A.****W/O HERBICIDE SAVED \$6.35/A.
RIDGE-TILL W/O HERBICIDE
COULD SAVE \$118.3M ON IOWA'S
ROW CROPS.****W/O HERBICIDE REDUCED IOWA'S
ENERGY USE BY 18.6M GAL DIESEL****THE ONLY WAY TO HAVE ZERO
HERBICIDE LEVELS IN GROUND-
WATER IS ZERO USE.****P.F.I.**

CHART -10-

1988: RIDGE-TILL WITH AND WITHOUT HERBICIDES						
CORN YIELDS BU./A						
	HERB.	NONE	DIFF. FROM NONE	LSD ₍₀₅₎	HERB. COST	C.V. %
DORDT No R.T. 2 Cult	(a) 72.51 CONQUEST	(a) 71.21	+ 1.3	4.34	13.00	5.11
GRAU 2 R.H. 2 Cult.	(a) 110.85 DUAL	(a) 110.48	+0.37	3.37	4.81	2.05
STONEYPHER 2 R.H. 2. CULT.	(a) 94.47 DUAL MARKSMAN	(a) 93.80	+0.67	2.17	8.52	1.55
AVG./A.	92.61	91.83	+0.78	3.29	\$ 8.78	2.90

P.F.I.

CHART -11-

1988: RIDGE-TILL WITH AND WITHOUT HERBICIDES.						
SOYBEAN YIELDS BU./A.						
	HERB.	NONE	DIFF. FROM NONE	LSD (65)	HERB. COST.	C.V. %
GRAAF 1 R.H., 2 CULT	31.74 ^(a) AMIBEN	28.74 ^(a)	+ 3.00	3.73	-4.61	8.31
GRAU 1 R.H., 2 CULT	32.20 ^(a) DUAL LEXONE	32.40 ^(a)	- 0.20	2.04	-5.46	4.26
HAGENSICK NO R.H., 1 CULT	37.67 ^(a) AMIBEN	38.00 ^(a)	-0.33	1.57	-6.51	2.79
HANKS 1 R.H., 2 CULT.	30.86 ^(b) POST DASH BASAGRAN	25.63 ^(a)	+5.23*	1.20	-24.03 +36.61 #12.58	2.42
HARTSOCK 2 R.H., 2 CULT	34.33 ^(a) LASSO	33.00 ^(a)	+1.33	2.79	-4.35	5.58
MAYS 2 R.H., 1 CULT	35.42 ^(a) LASSO AMIBEN	36.85 ^(a)	-1.43	1.63	-10.01	3.04
AVG./A.	33.70	32.44	+1.26	2.16	# 3.06	4.47

P.F.I.