

Weed Counts

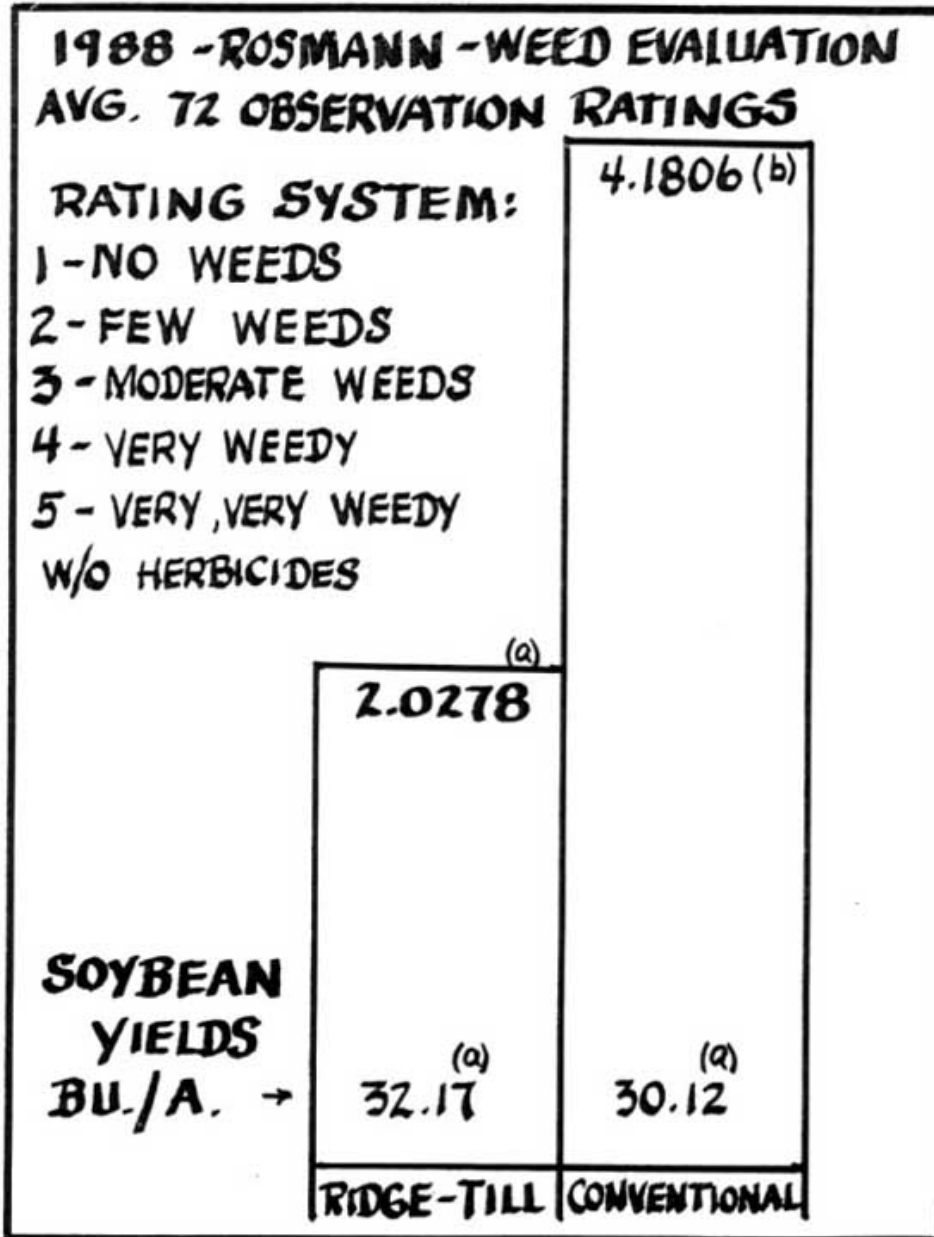
RON ROSMANN'S EXPERIMENT SHOWED SIGNIFICANT INCREASE IN WEEDS WITH CONVENTIONAL TILLAGE COMPARED TO RIDGE-TILL.

THE 72 VISUAL OBSERVATIONS HAD AN AVERAGE RATING OF 2.0278 FOR RIDGE-TILL AND 4.1806 FOR CONVENTIONAL TILLAGE, CHART 12. THE YIELDS WERE THE SAME FOR BOTH TREATMENTS. IN SEVERAL PAIRS OF TRIALS, THE WEEDS WERE PULLED AND COUNTED, CHART 13 AND 14.

THE CONVENTIONAL HAD MORE VELVETLEAF AND PIGWEED, WHILE RIDGE-TILL HAD MORE LAMBSQUARTER. THE LAMBSQUARTER IS REMOVED BY PRE-PLANT TILLAGE IN THE CONVENTIONAL SYSTEM. THE RIDGE-TILL PLANTER NEEDS TO BE EQUIPPED WITH HEAVY DUTY DISK HILLERS TO REMOVE THE LAMBSQUARTER. THE CONVENTIONAL PLOTS HAD 4.4 TO 8.2 TIMES MORE BROADLEAF WEEDS THAN RIDGE-TILL. ROSMANN'S COMPARISONS OF RIDGE-TILL WITHOUT HERBICIDES FERTILIZED WITH MANURE VS. COMPOST PRODUCED THE SAME YIELD OF SOYBEANS, CHART 15.

THE WEED COUNT OF THE ENTIRE PLOTS SHOWED NO REDUCTION IN WEED PRESSURE WITH COMPOST IN A RIDGE-TILL SYSTEM. BOTH MANURE AND COMPOST WERE FALL APPLIED OVER RIDGES AT 5.5 TONS PER ACRE.

CHART -12-



P.F.I.

CHART -13-

1988 - ROSMANN - WEED COUNT/A. RIDGE-TILL VS CONVENTIONAL TILL		
W/O HERBICIDES	RIDGE	CONV. ¹⁾
	TILL	
	PLOT-7	PLOT-8
	<u>WEED NO./A.</u>	
LAMBSQUARTER -	17.88	0.00
VELVETLEAF -	6.88	16.5'
PIGWEEED -	<u>123.80</u>	<u>1203.65</u>
TOTAL BROADLEAF -	148.56	1220.16
SOYBEAN YIELD		
BU. / A.	33.81	32.22

1) TWO DISK, ONE FIELD CULTIVATE

P.F.I.

CHART -14-

1988 - ROSMANN - WEED COUNT/A. RIDGE-TILL VS CONVENTIONAL TILL		
W/O HERBICIDES	RIDGE	
	TILL-9 <u>NO./A.</u>	CONV-10 <u>NO./A</u>
LAMBSQUARTER -	4.13	0.00
VELVETLEAF -	9.63	103.17
PIGWEEED -	<u>374.16</u>	<u>1203.65</u>
TOTAL BROADLEAF -	387.92	1306.82
SOYBEAN YIELD		
BU./A.	33.81	33.62
↳ TWO DISK, ONE FIELD CULTIVATE		

P.F.I.

CHART -15-

1988 - ROSMANN MANURE, COMPOST TRIALS RIDGE-TILL W/O HERBICIDES		
	<u>MANURE</u>	<u>COMPOST</u>
SOYBEANS BU./A.	32.35 ^(a)	32.39 ^(a)
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WEED COUNT		
<u>NUMBER/ACRE</u>		
LAMBSQUARTER -	31.26	29.89
VELVETLEAF -	68.05	64.60
PIGWEEED -	<u>88.05</u>	<u>103.68</u>
TOTAL BROADLEAF-	187.36	198.16
MANURE AND COMPOST FALL APPLIED OVER RIDGES AT 5.5 TONS PER ACRE.		

P.F.I.