



On-Farm Comparison Results

- JERRY MULLIKEN

Years: 1998-2002

Title: Influence of Existing Soybean Residue on Corn Performance

Crop: Corn

NSFGPP Operator: Jerry Mulliken, Dodge County

Private Industry Cooperator: Jerry Mulliken

Objective: To determine and document the influence of existing soybean residue on the profitability of producing corn.

Treatments: Planting into existing soybean residue vs. planting into strips where the residue is removed two weeks prior to planting (removed when early preplant herbicide is applied).



On-Farm Comparison Results

- JERRY MULLIKEN

Results: Variable		Residue	Residue Removed	Prob >/T/
Corn 1998	Yield, bu/ac at 15.5%	119	122	0.05**
	Moisture, %	14.0	14.1	0.14 ns
	Test Wt., lbs/bu	57.3	57.2	0.69 ns
	Population	18,100	17,800	0.51 ns
	Internode length, in.	4.1	4.2	0.38 ns
	Cost/ac	-----	\$3.00	
	Corn 1999	Yield, bu/ac at 15.5%	127	130
Moisture, %	13.7	13.7	0.44 ns	
Test Wt., lbs/bu	60.7	60.6	0.76 ns	
Population	20,400	20,800	0.26 ns	
Cost/ac	-----	\$3.00		



Nebraska
Soybean & Feed Grains
Profitability Project

On-Farm Comparison Results

- JERRY MULLIKEN

	<u>Variable</u>	<u>Residue</u>	<u>Residue Removed</u>	<u>Prob >/T/</u>
Corn 2000	Yield, bu/ac at 15.5%	130	138	0.0124**
	Moisture, %	12.3	12.2	0.0066***
	Test Wt., lbs/bu	59.3	59.1	0.228 ns
	Population	16,800	17,600	0.176 ns
	Cost/ac	-----	\$3.00	
Corn 2001	Yield, bu/ac at 15.5%	112	120	0.024**
	Moisture, %	14.2	14.1	0.229 ns
	Test Wt., lbs/bu	60.3	60.5	0.363 ns
	Pop., 1000 plants/ac	21.5	18.8	0.021**
	Cost/ac	-----	\$3.00	



Nebraska
Soybean & Feed Grains
Profitability Project

On-Farm Comparison Results

- JERRY MULLIKEN

	<u>Variable</u>	<u>Residue</u>	<u>Residue Removed</u>	<u>Prob >/T/</u>
Corn 2002	Yield, bu/ac at 15.5%	83	86	0.378 ns
	Moisture, %	15.6	15.6	1.000 ns
	Test Wt., lbs/bu	58.3	57.6	0.079 *
	Pop., 1000 plants/ac	17.7	18.3	0.432 ns
	Cost/ac	-----	\$3.00	



On-Farm Comparison Results

- JERRY MULLIKEN

Summary: Removal of residue prior to planting resulted in a significant yield increase in 1998. In 1999, residue removal had no significant effect on growth and grain yield of corn. (Difference in grain yield significant at 89% confidence level.) Grain yield was significantly higher in 2000 where soybean residue was removed prior to planting. Grain moisture was slightly lower where residue was removed. In 2001, removal of soybean residue resulted in increased yield and a slightly lower plant population. Removal of residue in 2002 resulted in slightly lower grain test weight.