

Fall Soybean Residue Management Trial – Soybean Test Crop

Trial ID: 2017-SRM01 – R.M. of Taché

Objective: Quantifying the agronomic impacts of reducing tillage after soybeans on a subsequent crop in replicated strips across the field. We compare direct seeding into soybean stubble vs. seeding into cultivated soybean stubble in a field with a history of minimum till.

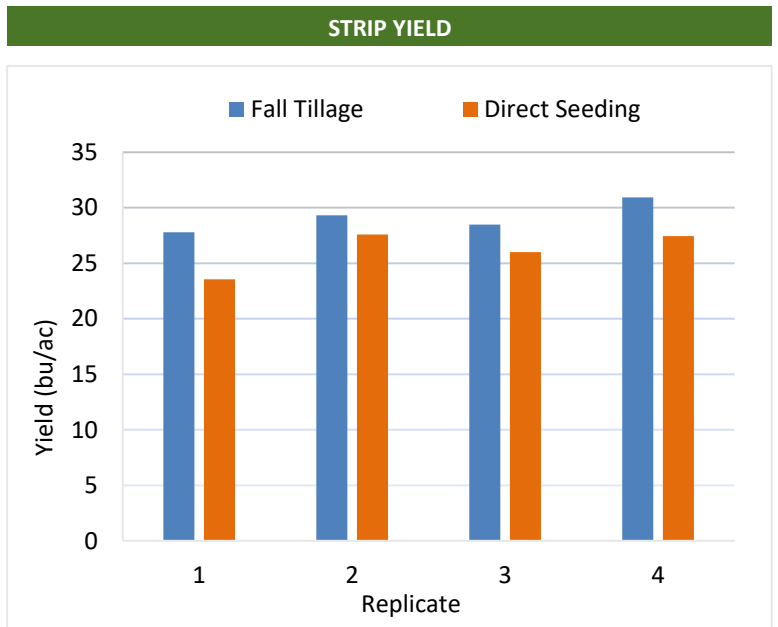
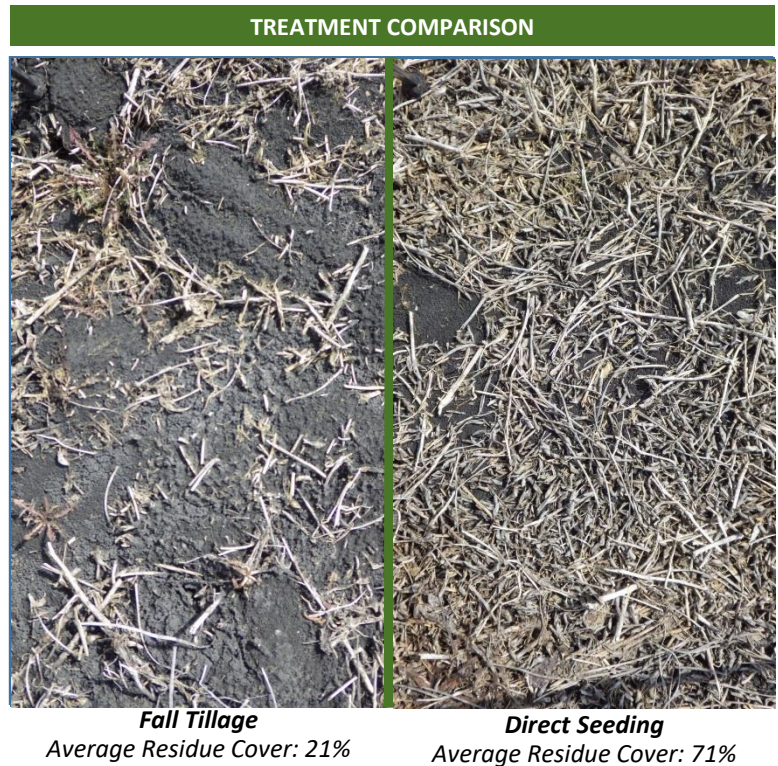
TRIAL INFORMATION	
Treatments	Fall Tillage (Cultivator) Direct Seeding (No Fall Tillage)
Rural Municipality	Taché
Previous Crop	Soybean
Soil Description	Clay
Planting Date	May 13, 2017
Seeding Implement	John Deere Max Emerge
Test Crop	Soybean
Row Spacing	22"
Seeding Rate	190,000 seeds/ac
Tillage Application Date	October 20, 2016
Harvest Date	September 14, 2017

PRECIPITATION†				
	May	June	July	Aug
Rainfall	25.2	87.3	28.6	12.4
Normal	69.2	100.1	93.2	73.8

† Growing season precipitation (mm)

PLANT STAND (plants/ac)		
	V1 growth stage	R1 growth stage
Fall Tillage	158,400	166,800
Direct Seeding	161,700	168,600
P-Value	0.6329	0.7172
Significance	No	No

OVERALL YIELD	
	Mean (bu/ac)
Fall Tillage	29.1
Direct Seeding	26.2
Yield Difference	2.9
P-Value	0.0124
CV	7.9%
Significance	Yes



Summary: Soybean Yield was significantly higher in the fall tillage treatment compared to direct seeding into soybean stubble. There were no differences in plant stand between tillage treatments. Overall plant stands in both treatments were lower than the target due to dry conditions during establishment in May. Precipitation was significantly below normal in May, July, and August.