NDSU North Central Research Extension Center
2016 Strip-till Corn Trial at Minot

This trial was designed to compare corn that was planted into strip till and no-till. Each systems was planted on May 3 (early) and on May 20 (late) with three different maturing hybrids.

Planting System	Planting Date	Hybrid	Days to Emerge	Silking Date	Ear Height	Test Weight	Harvest Moisture	Grain Yield
			DAP[a]	July	inches	lbs/bu	%	bu/A
No-till	early	76 RM	13	23	37	58.5	19	152
		80 RM	13	28	38	58.5	19	164
		85 RM	13	21	34	58.9	18	137
	late	76 RM	12	28	38	60.9	22	144
		80 RM	12	28	41	58.2	20	144
		85 RM	12	28	38	55.9	20	147
Strip till	early	76 RM	15	20	36	61.1	20	142
		80 RM	15	23	37	57.9	19	153
		85 RM	15	23	35	55.7	18	147
	late	76 RM	9	28	36	60.7	21	137
		80 RM	9	29	37	58.7	20	152
		85 RM	9	26	39	56.7	21	148
C.V.%			0.0	0.2	6.3	2.5	8.3	7.8
LSD 5%			1	2	3	2.2	1	17

Tillage System Comparisons

Tillage System	Days to Emerge	Silking Date	Ear Height	Test Weight	Harvest Moisture	Grain Yield
	DAP[a]	July	inches	lbs/bu	%	bu/A
No Till	12	25	38	58.5	20	148
Strip Till	12	25	37	58.7	20	146
LSD 5%	NS	NS	NS	NS	NS	NS

Planting Date Comparisons

Planting Date	Days to Emerge	Silking Date	Ear Height	Test Weight	Harvest Moisture	Grain Yield
	DAP[a]	July	inches	lbs/bu	%	bu/A
Early	14	22	36	58.6	19	149
Late	10	28	38	58.5	21	146
LSD 5%	1	1	NS	NS	NS	NS

Hybrid Comparisons

Hybrid	Days to Emerge	Silking Date	Ear Height	Test Weight	Harvest Moisture	Grain Yield
	DAP[a]	July	inches	lbs/bu	%	bu/A
76 RM	12	24	36	60.4	20	140
80 RM	12	26	38	58.3	19	153
85 RM	12	25	38	56.9	20	149
LSD 5%	NS	NS	NS	2.0	NS	NS

2016 Strip-till Corn Trial at Minot—Continued

Tillage System by Planting Date Comparisons

Tillage System	Planting Date	Days to Emerge	Silking Date	Ear Height	Test Weight	Harvest Moisture	Grain Yield
		DAP[a]	July	inches	lbs/bu	%	bu/A
No Till	early	13	24	36	58.6	19	151
	late	12	28	39	58.3	21	145
Strip Till	early	15	22	36	58.2	19	147
	late	9	28	37	58.7	21	146
LSD 5%		1	1	NS	NS	NS	NS

[a] *DAP = days after planting.* *NS= no statistical difference.*

Planting Rate: 28,000 seeds/A *Row Spacing: 30"*

Harvest Date: October 28 *Previous Crop: spring wheat* *Soil Type: Williams Loam*

Summary: 10 inch wide tillage strips were made into standing spring wheat stubble in the fall of 2015 with a Dawn Equipment Pluribus system. Land adjacent to the strip till was left undisturbed as no-till. Three different maturing hybrids were planted on May 3 (early) and on May 20 (late). There was no statistical difference between tillage systems for any agronomic characteristic, seed quality or grain yield. Planting date had an influence on emergence and silking date but did not influence ear height, test weight, harvest moisture or grain yield in this trial. The only statistically significant difference between hybrids was for test weight. There were no meaningful interactions between tillage system, planting date and hybrid in this trial. Based on this single year, there does not appear to be any advantage of one tillage system over the other, however, additional trials will need to be