

agronomy



NOVEMBER 2019

SOUTH DAKOTA STATE UNIVERSITY® AGRONOMY, HORTICULTURE, & PLANT SCIENCE DEPARTMENT

2019 South Dakota Conventional Corn Hybrid Trial Results South Shore

Jonathan Kleinjan | SDSU Extension Crop Production Associate
Kevin Kirby | Agricultural Research Manager
Shawn Hawks | Agricultural Research Manager

Location: 8.5 miles west of South Shore (57263) in Codington County, SD

(GPS:45.106938 -97.098725)

Cooperator: SDSU Northeast Research Farm - Allen Heuer, manager

Soil Type: Kranzburg-Brookings silty clay loams, 0-2% slope

Fertilizer: 80 lb/acre 30-10-10 starter + 200-0-0-5S-10Z broadcast preplant

Yield Goal: 200 bu/acre
Previous crop: Soybeans
Tillage: Conventional
Row spacing: 30 inches
Seeding Rate: 32,000/acre

Herbicide: Pre: 1.2 qt/acre Harness Xtra (acetochlor + atrazine)

Post: 0.9 oz/acre Accent (nicosulfuron) + 3 oz/acre Callisto (mesotrione)

Date seeded: 5/14/2019 Date harvested: 11/8/2019



2019 South Dakota Conventional Corn Hybrid Trial Results South Shore

Table 1. Conventional corn hybrid performance results (average of 4 replications - **Early Season Trial** (95 day maturity or less) at South Shore, SD.

Hybrid Information		Agronomic Performance							
Brand	Hybrid	Maturity Rating	Yield Bu/A (15.5%)	Moisture	Test Wt. (lbs/bu)	Lodging (%)	Final Stand (plants/A)		
Federal Hybrids	4580 CONV	95	245.1	27.3	52.0	1.3	33300		
Federal Hybrids	4440 CONV	94	243.0	26.0	51.4	0.7	31000		
Federal Hybrids	4240 CONV	92	242.2	23.2	53.3	1.0	32700		
Check	CHECK	100	239.1	29.6	52.1	1.0	33500		
Peterson Farms Seed	16G95	95	238.8	26.8	51.7	0.0	33300		
Thunder Seed	3595 CONV	95	232.2	27.0	51.5	1.8	31300		
Trial Average			239.7	27.0	52.0	1.0	32700		
LSD (0.05)†		10.5	2.0	1.2	2.4	1000			
		C.V.‡	3.0	4.8	1.6	-	2.2		

^{*} Lodging percentage - stalks broken below the ear as a percentage of the final stand.

Table 2. Conventional corn hybrid performance results (average of 4 replications - Late Season Trial (96 day maturity or more) at South Shore, SD.

Variety Information		Agronomic Performance						
Brand	Hybrid	Maturity Rating	Yield Bu/A (15.5%)	Moisture	Test Wt. (lbs/bu)	Lodging (%)	Final Stand (plants/A)	
Federal Hybrids	5280 CONV	102	249.0	31.7	50.6	3.3	33000	
Thunder Seed	2996 CONV	96	247.5	25.6	50.5	3.0	32800	
Federal Hybrids	4800 CONV	98	244.4	26.3	50.6	0.0	32600	
Federal Hybrids	4770 CONV	97	243.5	26.6	51.2	0.0	31800	
Thunder Seed	2098 CONV	98	241.0	27.4	50.9	0.3	32300	
Federal Hybrids	4780 CONV	97	238.1	28.5	51.3	0.3	33500	
Check	CHECK	100	233.8	29.1	51.1	0.0	32800	
Viking	O.98-98	98	230.5	25.7	49.6	4.3	31100	
Viking	46-96	96	230.2	29.6	50.6	1.0	33800	
Federal Hybrids	5008 CONV	100	225.5	33.9	51.2	0.0	32200	
	Trial Average LSD (0.05)†		238.3	28.4	50.7	1.2	32600	
			12.0	1.4	1.0	1.8	1100	
		C.V.‡	3.5	3.5	1.4	-	2.2	

^{*} Lodging percentage - stalks broken below the ear as a percentage of the final stand.

[†] Yield or moisture value required (≥LSD) to determine if varieties are significantly different from one another.

[‡] C.V. is a measure of variability or experimental error, 15% or less is acceptable.

[†] Yield or moisture value required (≥LSD) to determine if varieties are significantly different from one another.

[‡] C.V. is a measure of variability or experimental error, 15% or less is acceptable.