

VRI – Corn Product Response to Irrigation and Population - Gothenburg, NE

TRIAL OVERVIEW

- With the increase in limited irrigation due to reductions in pumping capacity or restrictions on the amount of water producers are able to pump over a certain period of time, it is imperative that Monsanto tests products under varying irrigation rates to supply better corn product recommendations by irrigation level.

RESEARCH OBJECTIVE

- The objective of this study was to evaluate the effect of different seeding rates under full and limited irrigation on the yield of DEKALB® corn products.

Location	Soil	Previous Crop	Tillage Type	Planting Date	Harvest Date	Potential Yield/Acre	Planting Rate/Acre
Gothenburg, NE	Hord silt loam	Corn	Conventional	05/07/2017	11/01/2017	240 bu/acre	24K, 30K, 36K, and 42K

SITE NOTES:

- Eleven DEKALB corn products were evaluated under two irrigation rates: 100% full irrigation (FI) to meet the evapotranspiration demands of the crop (totaling 6 inches) and 50% of FI (totaling 3 inches).
- Irrigation treatments were applied using a variable rate irrigation system.
- The study design was a split-split plot with irrigation as the whole plot, corn product as the first split, and planting density as the second split.

UNDERSTANDING THE RESULTS

DEKALB corn products	Seeding Rate (seeds/acre)				Average	DEKALB corn products	Seeding Rate (seeds/acre)				Average
	24K	30K	36K	42K			24K	30K	36K	42K	
----- Average yield (bu/acre) -----											
DKC55-20RIB brand blend	200	207	216	214	209	DKC62-52RIB brand blend	205	220	230	214	217
100% FI	202	217	217	230	216	100% FI	218	234	249	229	232
50% FI	196	187	214	182	195	50% FI	192	206	210	198	202
DKC55-84RIB brand blend	202	215	225	231	218	DKC63-55RIB brand blend	187	204	199	194	196
100% FI	207	232	231	248	229	100% FI	179	213	211	199	200
50% FI	198	197	219	214	207	50% FI	196	195	188	189	192
DKC56-45RIB brand blend	197	214	231	232	218	DKC63-60RIB brand blend	207	223	208	223	215
50% FI	197	214	231	232	218	100% FI	219	246	233	263	240
DKC58-06RIB brand blend	209	240	232	225	226	50% FI	195	200	183	184	190
100% FI	217	247	239	253	239	DKC63-21 brand	210	220	240	219	222
50% FI	200	232	224	197	213	100% FI	207	212	230	216	216
DKC60-67RIB brand blend	205	227	233	235	225	50% FI	213	228	250	222	228
100% FI	208	228	235	242	228	DKC64-34RIB brand blend	220	234	244	249	237
50% FI	203	227	231	228	222	100% FI	237	260	253	268	255
DKC60-87RIB brand blend	194	206	209	209	204	50% FI	203	208	235	231	219
100% FI	196	209	198	212	204						
50% FI	192	203	220	206	205						

Table 1. DEKALB corn product performance influenced by seeding and irrigation rate

WHAT DOES THIS MEAN FOR YOUR FARM?

- Farmers should carefully consider corn product selection and seeding rate based on the irrigation capabilities in each field to help maximize their return.
- Monsanto intends to continue these trials for the 2018 season.



LEGAL STATEMENT

The information discussed in this report is from a single site, replicated demonstration. This information piece is designed to report the results of this demonstration and is not intended to infer any confirmed trends. Please use this information accordingly. For additional agronomic information, please contact your local brand representative. Developed in partnership with Technology Development & Agronomy by Monsanto.

Individual results may vary, and performance may vary from location to location and from year to year. This result may not be an indicator of results you may obtain as local growing, soil and weather conditions may vary. Growers should evaluate data from multiple locations and years whenever possible. **Always read and follow IRM, where applicable, grain marketing and all other stewardship practices and pesticide label directions.** ©2018 Monsanto Company. All other trademarks are the property of their respective owners. ©2018 Monsanto Company All Rights Reserved. 171205080051 012518CAM