

Table 1. Site characteristics and field activities, 2021

Parameter/ activity	Site			
	S1	S2	S3	S4
Location				
Lat.	42.898889	42.843056	42.858611	42.8116667
Long.	-88.590833	-88.610833	-88.5725	-88.4875
Rye row width (in)	7.5	10	10	7.5
Soil				
	YaA	MuB	FsB	FsA
pH	6.9	6.9	6.3	6.9
OM (%)	1.9	1.3	1.4	1.9
P (ppm)	89	74	55	41
K (ppm)	115	92	68	74
S (ppm)	2.4	2.6	3.5	2.8
Previous Crop				
Hybrid	Pioneer	Pioneer	Agri-gold	O'Brien
	P0306Q	0157RR	6267vt2	OB1105
RM	103	101	102	103
Planting date	5/7/20	5/3/20	4/26/20	5/6/20
Harvest date	10/26/20	10/25/20	10/25/20	11/6/20
Total N (lb/a)	133	146	147	144
Yield (bu/a)	212	169	143	167
Cover crop				
Rye planting	10/27	10/24	10/24	11/8
Rye sampling 1	4/22	4/24	4/23	4/24
Rye termination 1 (preemergence ⁽¹⁾)	4/27	4/27	4/27	4/27
Rye sampling 2	6/2	6/3	6/3	6/6
Rye termination 2 (postemergence ⁽²⁾)	6/4	6/4	6/4	6/7
Soybean				
Variety	Pioneer	Brevant	Stein	Renk
	P22T86E	B210EE	19EA32	G2350E
Planting date	4/22	5/1	5/2	5/12
Seeding rate (seeds/a, x1000)	141	129	125	180
Row width (in)	15	30	30	30
Preemergence application	4/27	4/27	4/27	4/27
Weed density 1 (pretreatment)	n/a	6/17	6/17	6/17
Postemergence application	n/a	6/30	6/30	6/25
Weed density 2 (preharvest)	n/a	10/3	9/23	9/30
Harvest	n/a	10/18	10/17	9/30

⁽¹⁾ Preemergence, postemergence designations reference soybean.⁽²⁾ Terminated at anthesis.