

SSD Spring Seeding Date Trial

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2024-05-08

This trial occurred in K8 in the spring of 2024 to determine kernza establishment in early spring and whether different soil conditions resulted in different stand counts

Stand counts were a 12" length set randomly in a row and moved to a more representative area only if there was an obvious error in the section of row it was placed

Plots in the 500s did the best, with 508 and 509 as favorites. These are plots in uncompacted soil that were rototilled, packed, seeded, and then packed again with direction of packing not mattering.

Takeaway: Soil prep maybe impacts seed germination but it wasn't observed in this trial.

Treatment list

treatment	seeding	date	soil.condition
1	rototill + pack + seed + pack north south	4Apr	compacted
2	rototill + pack + seed	4Apr	compacted
3	rototill + pack + seed + pack west east	4Apr	compacted
4	rototill + pack + seed + pack north south	4Apr	uncompacted
5	rototill + pack + seed	4Apr	uncompacted
6	rototill + pack + seed + pack west east	4Apr	uncompacted
7	seed + pack north south	4Apr	uncompacted
8	seed	4Apr	uncompacted
9	seed + pack west east	4Apr	uncompacted
10	seed	14Apr	uncompacted

Table 2: there were 3 to 9 observations of every treatment

treatment	n
1	3
2	3
3	3
4	6
5	6
6	6
7	6
8	6
9	6
10	9

plant counts

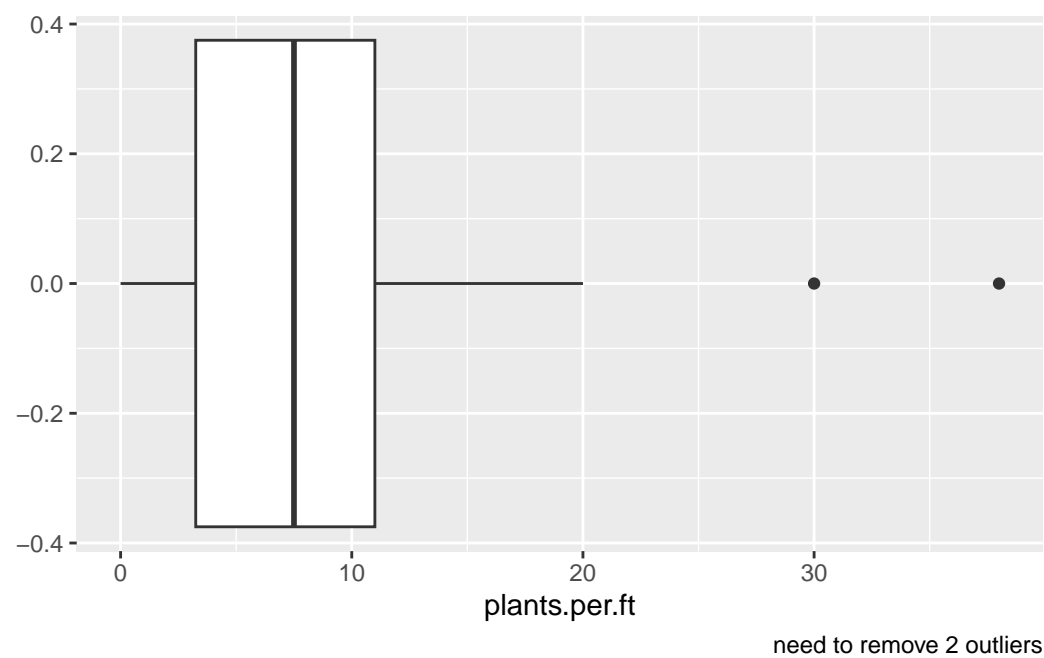


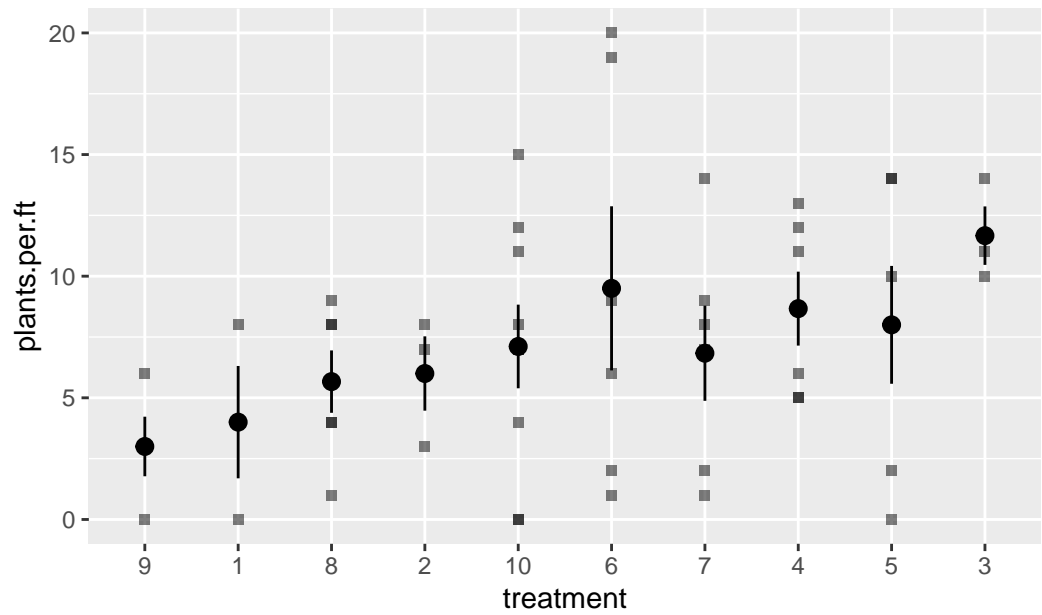
Table 3: there were 3 to 9 observations of every treatment even after removing outliers

treatment	n
1	3
2	3
3	3
4	6
5	6
6	6
7	6
8	6
9	4
10	9

summary

Table 4: Plants per foot summarized among different treatments

treatment	mean	sd
9	3	2
1	4	4
8	6	3
2	6	3
7	7	5
10	7	5
5	8	6
4	9	4
6	10	8
3	12	2



Dots and bars are mean and standard error. squares are observations

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
factor(treatment)	9	228.8868	25.43186	1.030469	0.4324521
Residuals	42	1036.5556	24.67989	NA	NA