

Seeding Rate Trials



OBJECTIVE

Understand the yield impact of varying soybean seeding rate within Ohio considering in-field variability and cultural practices implemented. Information from these trials are being used to improve management recommendations for growers throughout Ohio and help understand how variable-rate seeding may impact field by field profitability.

STUDY DESIGN

The primary recommendations for seeding rates in Ohio are determined by target final stands and average soil productivity. Variable rate seeding prescriptions have the potential to better match seeding rate to productivity zones in an effort to optimize profits. Field studies were implemented in a strip-trial format and replicated at least three times with the fields. Results for individual sites plus aggregated pooled analyses were conducted.

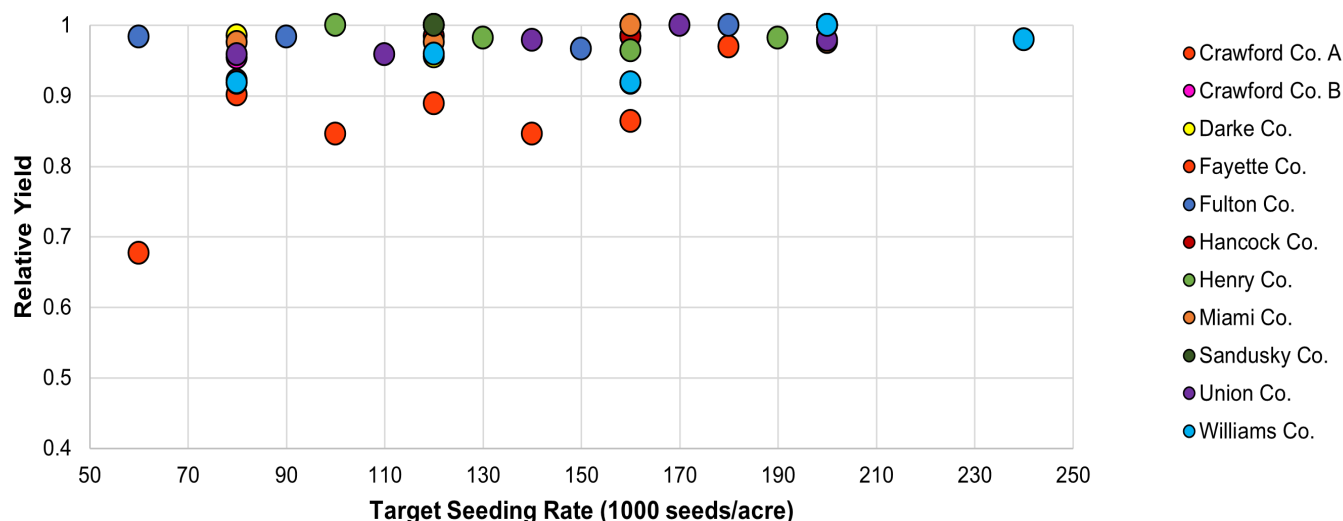
TOOLS OF THE TRADE



Sound information and data to improve decision-making for soybean variety selection, target seeding rate, and final population.

SUMMARY

- Across all sites, the average soybean stand was 83% of the target rate with individual sites ranging between 68% and 100%.
- Variation in soybean yield was primarily caused by differences in location and not differences in seeding rate in 2020.
- There was a significant response to soybean seeding rate at 6 out of 11 sites in 2020.



FOUR-YEAR SUMMARY

Several trials have reported stand counts higher than the target seeding rate. This is likely due to limitations of the meter to singulate seeds at very low soybean seeding rates.

Testing low seeding rates can also help provide information to improve replant decisions.



STUDY INFORMATION

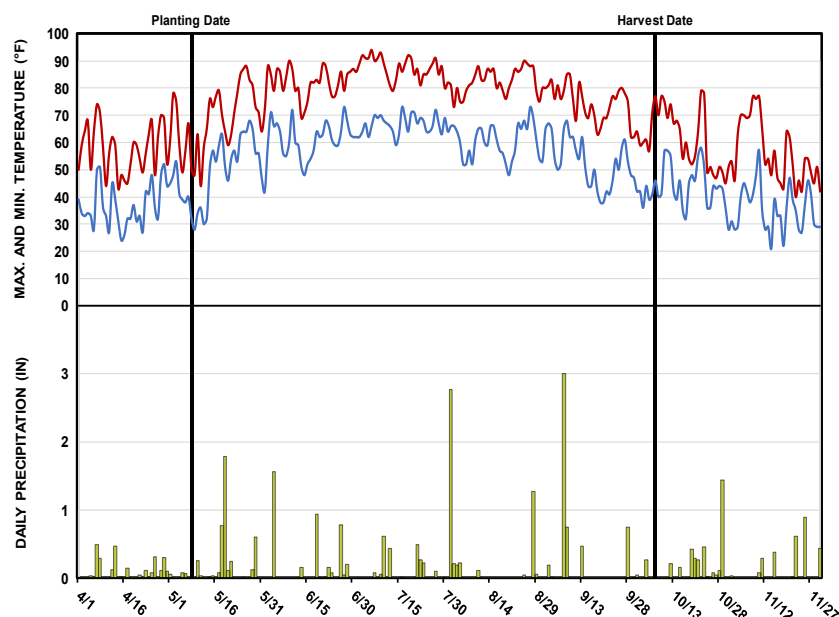
Planting Date	5/8/2020
Harvest Date	10/7/2020
Variety	33X8
Population	See Treatments
Acres	53
Treatments	4
Reps	4
Treatment Width	10 ft.
Tillage	Minimum Till
Management	Fertilizer
Previous Crop	Soybeans
Row Spacing	7.5 in.
Soil Type	Luray Silty Clay Loam, 73% Glynwood Silt Loam, 19%



eFields Collaborating Farm

OSU Extension
Crawford County A

WEATHER INFORMATION



PROJECT CONTACT

For inquiries about this project, contact
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Growing Season Weather Summary

	APR	MAY	JUN	JUL	AUG	SEP	Total
Precip (in.)	2.61	4.21	3.92	2.26	4.86	5.16	23.02
Cumulative GDDs	128	482	1122	1917	2573	3025	3025

RESULTS

Treatments (sds/ac)	Avg. Emergence (plants/ac)	Moisture (%)	Yield (bu/ac)	Return Above Seed (\$/ac)
80,000	72,000	12.4	73 a	655
120,000	72,250	12.3	72 a	630
160,000	109,300	12.2	70 a	595
200,000	133,750	12.4	81 a	683
Treatment Means with the same letter are not significantly different according to Fisher's Protected Least Significant Differences (LSD) test at alpha = 0.1.			LSD: 11.60 CV: 8.47%	