

Row Configurations in Cotton

Josh McGinty, Ph.D.

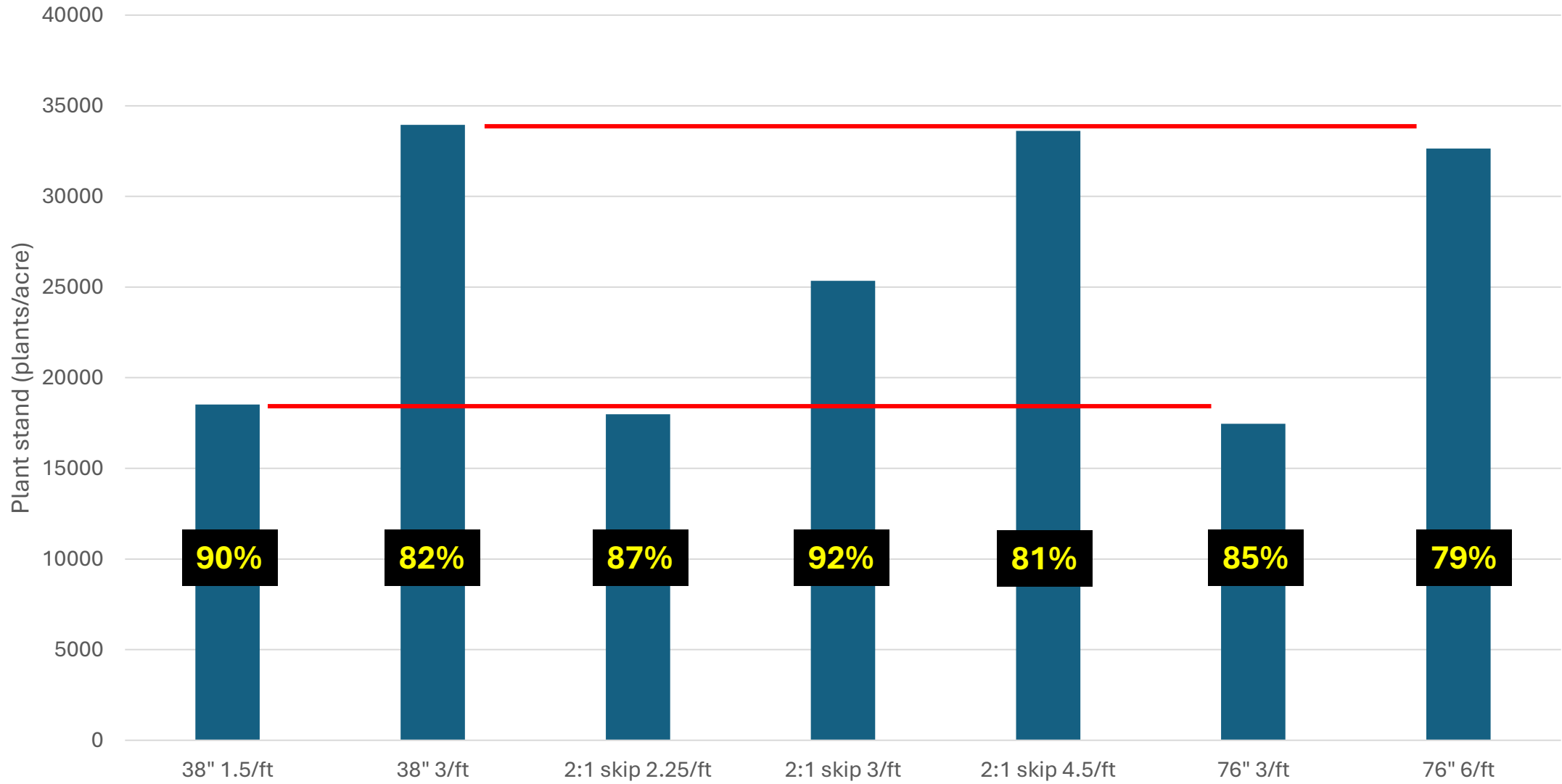
Dept of Soil and Crop Sciences

Corpus Christi, TX

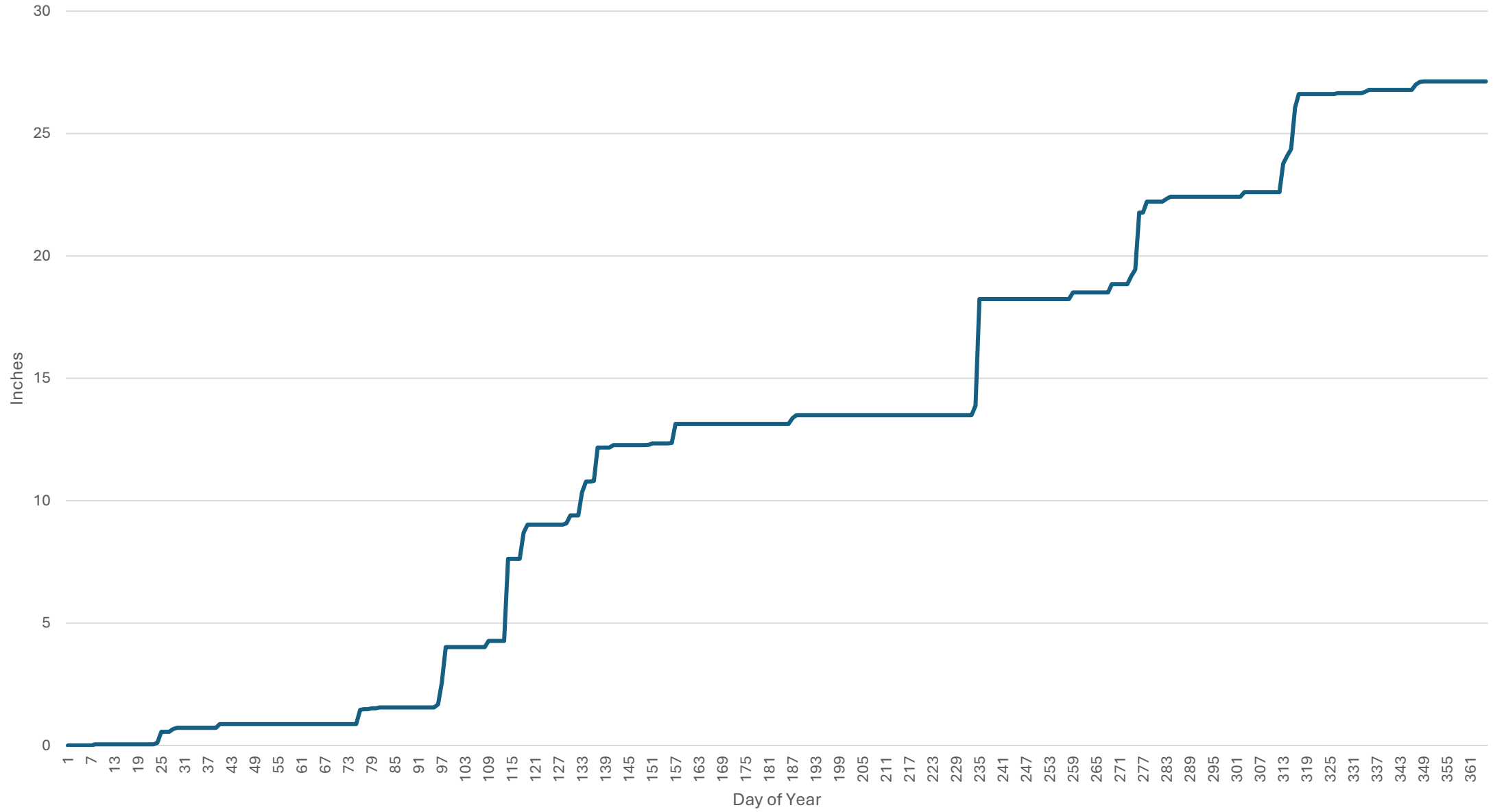


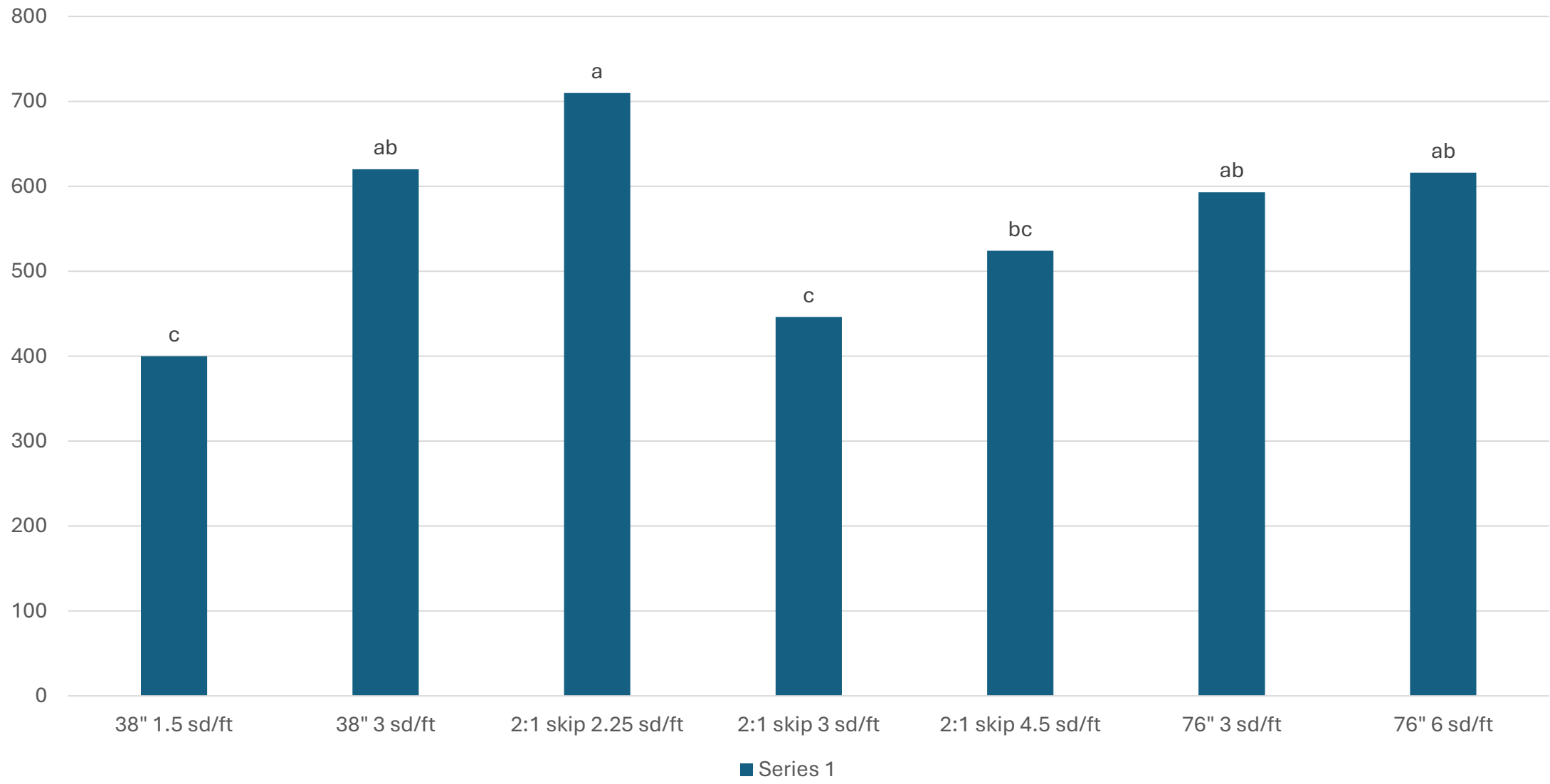
2023 Row Spacings Test - CCAREC

Row Spacing	Seed/ft	Seed/field acre
38" solid	1.5	20,600
38" solid	3	41,300
38" 2:1 skip	2.25	20,600
38" 2:1 skip	3	27,500
38" 2:1 skip	4.5	41,300
45" solid	3.6	41,300
76" solid	3	20,600
76" solid	6	41,300



Cumulative Precipitation - CCAREC 2023





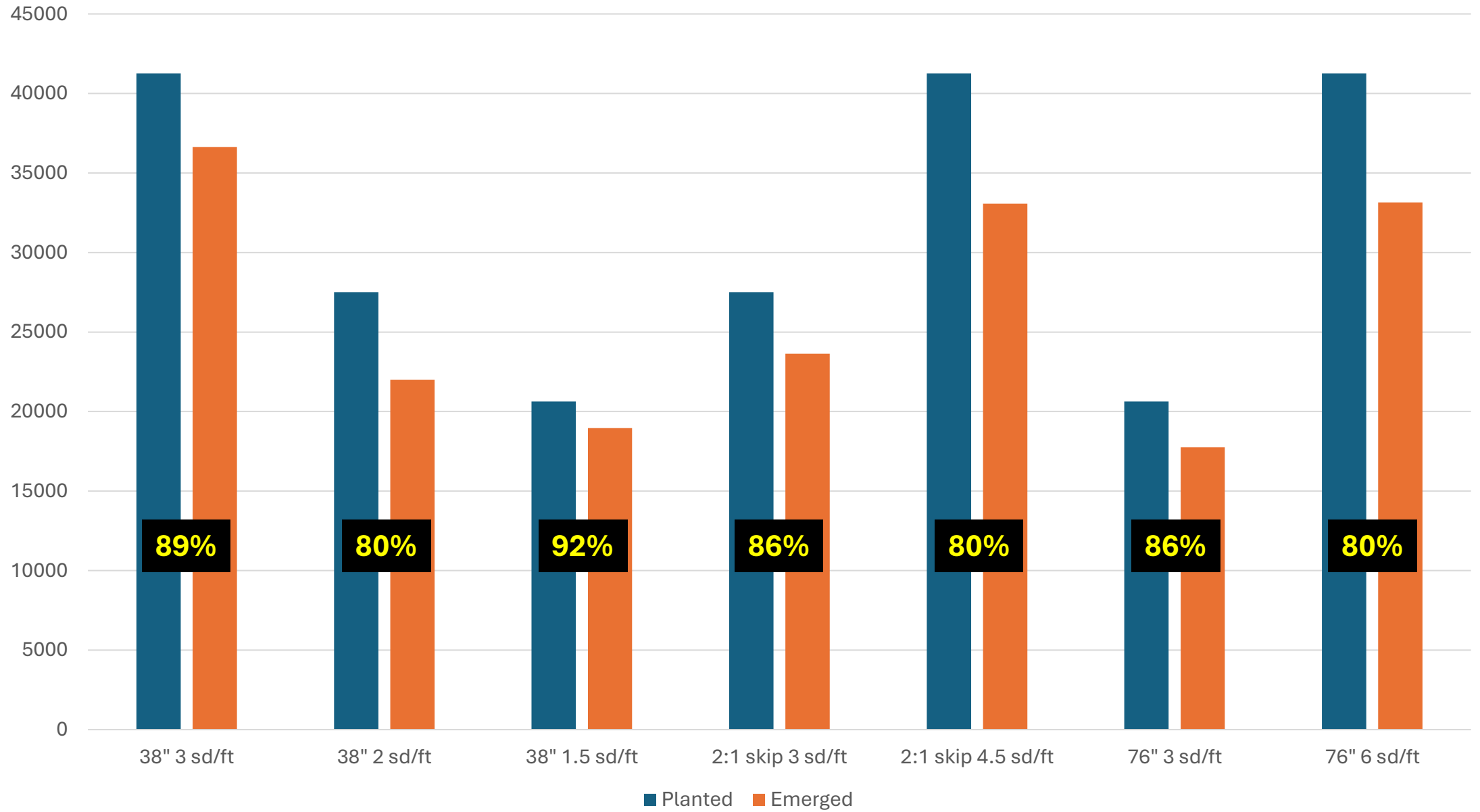
Row Spacing	Seed/ft	Micronaire	Length	Uniformity	Strength
38"	1.5	3.87	1.07	81.8	29.9 c
38"	3	3.68	1.07	81.5	30.0 c
38" 2:1 skip	2.25	4.04	1.08	83.0	32.4 ab
38" 2:1 skip	3	3.75	1.07	81.9	31.1 abc
38" 2:1 skip	4.5	3.94	1.08	81.9	31.2 abc
76"	3	3.87	1.10	83.2	32.9 a
76"	6	3.83	1.09	82.4	32.1 ab
45"	3.58	3.75	1.07	81.5	30.7 bc

Table 1. Lint results from three locations in San Patricio County, Conventional Row spacings vs. Wide Row spacings.

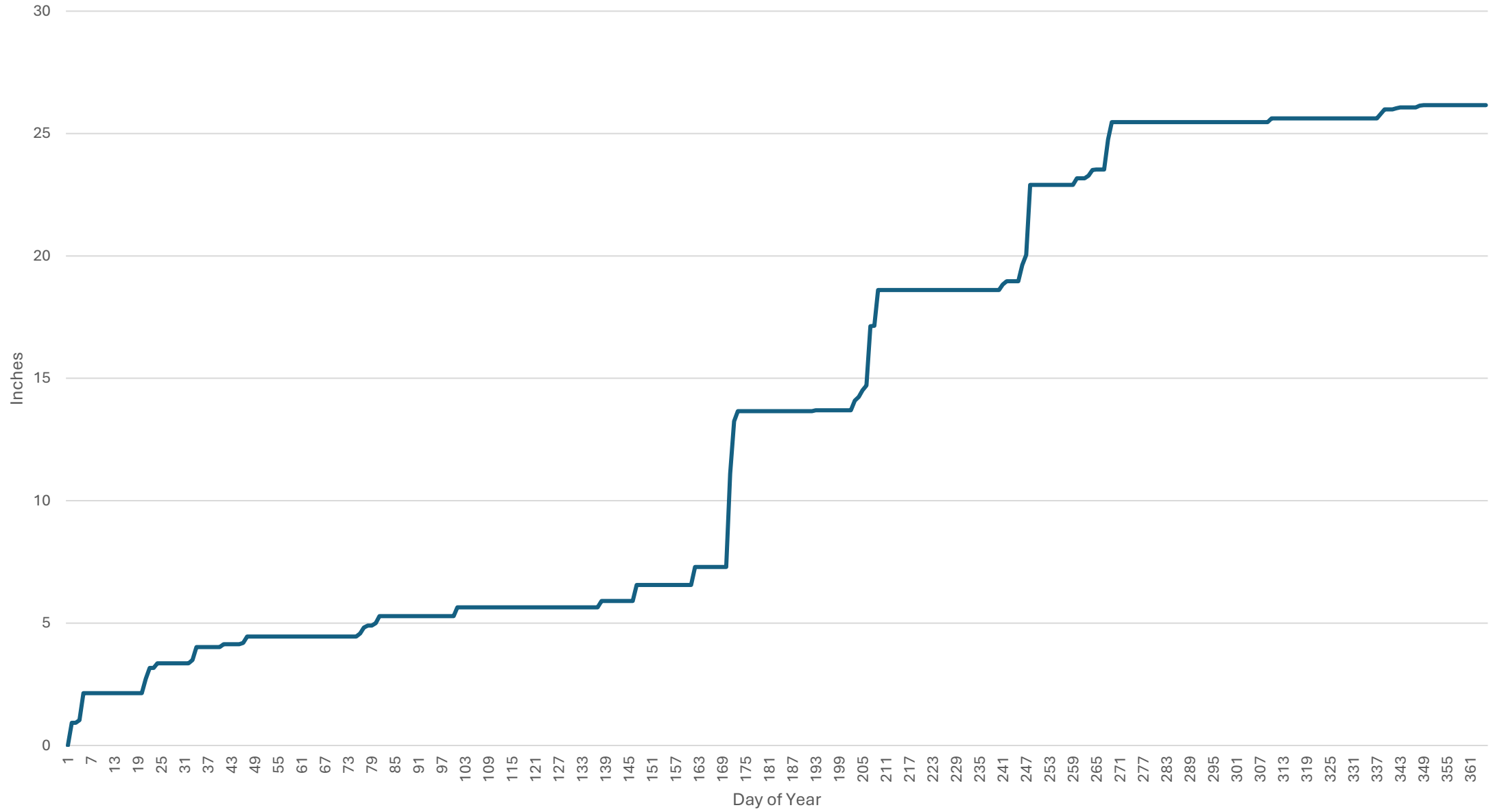
Plot	Turnout (%)	Fiber #	Matching Fiber #	Micronaire	Length	Uniformity	Strength	Loan Value
F1 CON 40"	41.9	910	910	4.33	1.11	82.3	28.2	53.55
F1 SKIP 80"	39.7	913	913	4.06	1.17	83.9	30.1	54.10
F2 40' FIELD	40.4	918	918	4.03	1.08	81.3	27.7	52.65
F2 SKIP 1 80"	38.7	914	914	3.89	1.10	82.5	29.9	52.75
F2 SKIP 2 80"	38.8	915	915	3.94	1.15	84.3	31.9	54.30
F3 30" (A)	41.6	911	911	3.89	1.12	82.4	33.9	54.15
F3 (A) 60"	41.3	916	916	3.95	1.14	83.1	36.8	54.40
F3 30" (B)	42.5	912	912	3.93	1.12	83.4	32.8	54.05
F3 (B) 60"	35.6	917	917	4.30	1.11	82.6	35.1	54.05

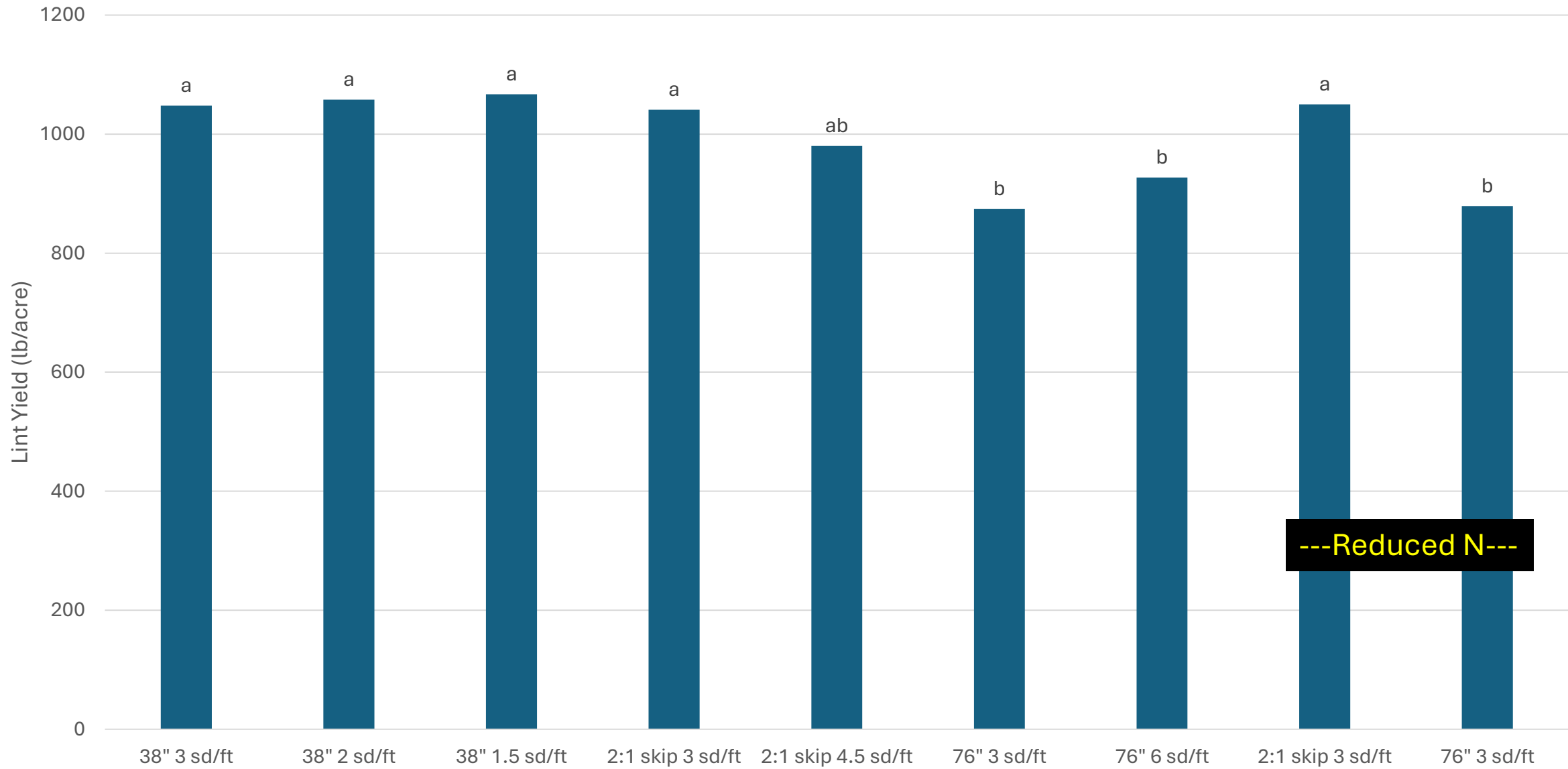
2024 Cotton Row Spacings Test - CCAREC

Row Spacing	Seed/ft	Seed/field acre	N (applied + residual)
38" solid	3	41,300	55 + 42
38" solid	2	27,500	55 + 42
38" solid	1.5	20,600	55 + 42
38" 2:1 skip	3	27,500	55 + 42
38" 2:1 skip	4.5	41,300	55 + 42
76" solid	3	20,600	55 + 42
76" solid	6	41,300	55 + 42
38: 2:1 skip	3	27,500	37 + 42
76" solid	3	20,600	28 + 42



Cumulative Precipitation - CCAREC 2024





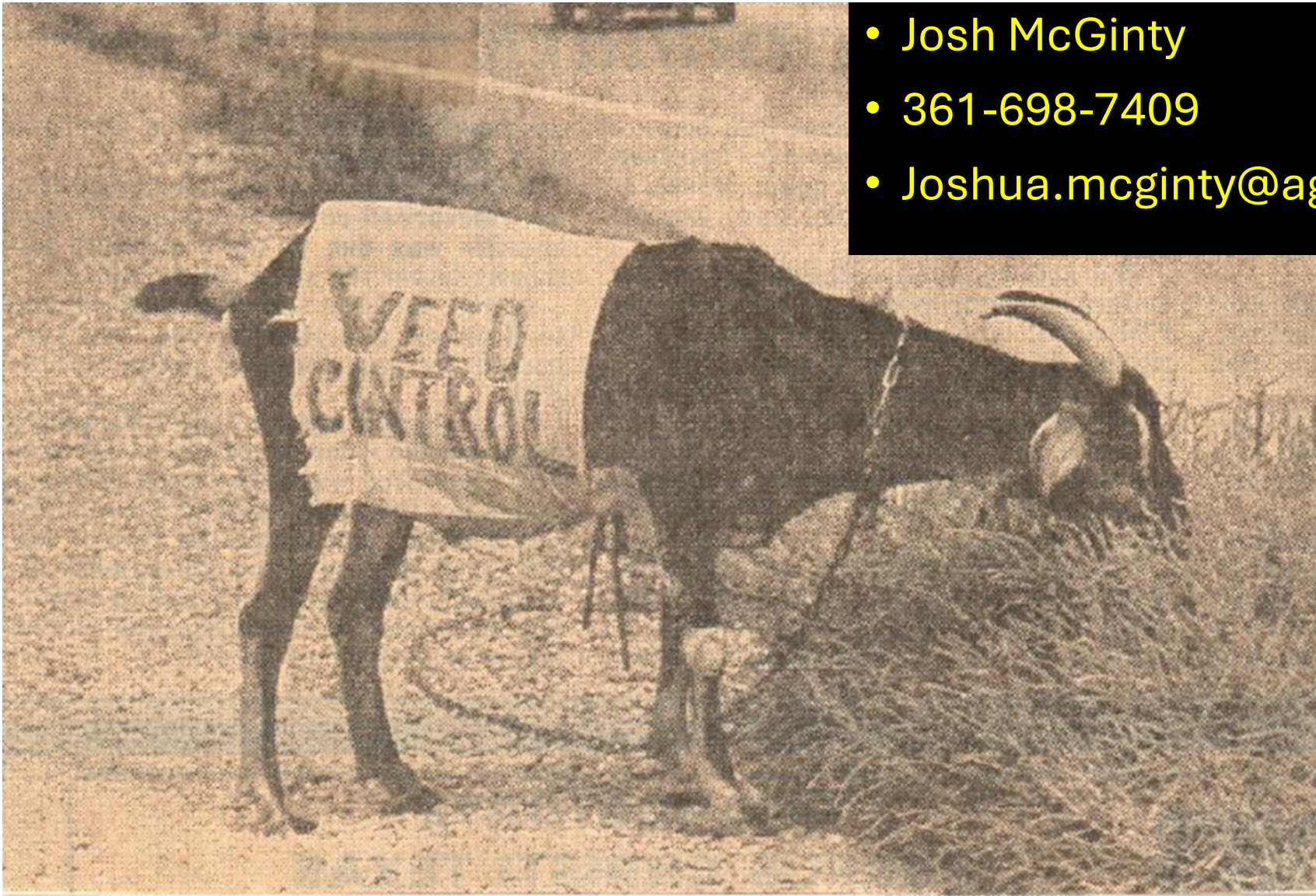
Spacing	Seed/ft	Applied N	Micronaire	Length	Uniformity	Strength
38"	3	55	5.34	1.11 e	83.1 bcd	31.3
38"	2	55	5.29	1.12 cde	83.0 cd	32.1
38"	1.5	55	5.32	1.10 e	82.6 d	31.3
38" 2:1 skip	3	55	5.25	1.14 a-d	83.7 abc	32.9
38" 2:1 skip	4.5	55	5.24	1.12 de	82.6 d	31.6
76"	3	55	5.28	1.17 a	83.8 ab	33.3
76"	6	55	5.15	1.16 ab	83.9 a	32.3
38" 2:1 skip	3	37	5.32	1.14 bcd	83.4 abc	31.6
76"	3	28	5.25	1.15 abc	83.1 bcd	32.3

Row Spacing	Seed/ft	Total Revenue	Variable Costs	Fixed Costs	Return above all costs
38"	3	\$899.52	\$560.23	\$150.69	\$188.61
38"	2	\$916.79	\$532.59	\$151.56	\$232.65
38"	1.5	\$916.59	\$519.84	\$151.55	\$245.20
38" 2:1 skip	3	\$905.79	\$527.94	\$151.01	\$226.84
38" 2:1 skip	4.5	\$848.02	\$541.63	\$148.12	\$158.27
76"	3	\$757.88	\$467.03	\$143.61	\$147.24
76"	6	\$810.50	\$527.14	\$146.20	\$137.12

Summary

- UWR = consistent 100-150 lb yield hit in 2024
 - To date, no differences in PGR or weed control encountered
 - Tends to mature 10-14 days later than 38" rows
 - Somewhat offset by more acres/hr at harvest?
- 2:1 skip a nice compromise
- With either UWR or 2:1 skip, upping seed drop doesn't seem to offer any benefit.

- Josh McGinty
- 361-698-7409
- Joshua.mcginty@ag.tamu.edu



READ THE LABEL CAREFULLY _ _ _