

Plot Assignment List:

Treatment #	Treatment Name	Plot Numbers			
1	38" - 92,000	102	204	302	413
2	38" - 117,000	105	210	317	417
3	38" - 142,000	108	219	312	416
4	38" - 167,000	110	207	309	412
5	30" - 92,000	111	212	314	418
6	30" - 117,000	101	206	311	420
7	30" - 142,000	109	203	307	411
8	30" - 167,000	104	211	318	407
9	22" - 92,000	116	218	320	410
10	22" - 117,000	113	216	308	419
11	22" - 142,000	112	214	301	414
12	22" - 167,000	107	220	315	409
13	15" - 92,000	115	209	306	415
14	15" - 117,000	119	201	319	406
15	15" - 142,000	103	217	310	405
16	15" - 167,000	106	208	313	404
17	7.5" - 92,000	117	213	305	403
18	7.5" - 117,000	114	205	316	401
19	7.5" - 142,000	120	215	304	402
20	7.5" - 167,000	118	202	303	408

Since the first report the trial at Pee Dee did get planted. It was a little later than I would have liked. The drive rows were planted right after the wheat was harvested on a Friday. I couldn't get to Pee Dee that day because of a conflict and over the weekend it rained at Pee Dee REC and stayed wet for a couple of weeks. So the trial looks a little odd because the drive rows are several inches taller than the trial itself, but I still think we have a good trial. The stand for all treatments are good and it has been a pretty good growing season overall.

I have presented this trial at all 3 locations at each station's field day. The first field day was at EREC and 85 participants were able to hear and walk into the row width and population trial. Several questions were asked about the trial. I thought it was in good shape and looked good. A couple weeks later at the Simpson field day, a good crowd of 95 was in attendance. The trial was in the middle of a small dry spell, but I thought the trial overall looked good. Finally the Pee Dee REC had their field day just a couple of weeks ago. With a total of 120 participants, the field day had two separate tours but most participants had an opportunity to see and hear about the trial. The trial was actually adjacent to the tent used as home base so participants had ample opportunities to check out the trial. At each field day, participants were reminded that such a trial would not be feasible without the funding of the SC Soybean Board and Checkoff.

It has gotten a little dry the last couple of weeks, but I think we will have good trials at all three locations. The irrigated trial here at EREC has been irrigated twice in the last couple of weeks but may have irrigated it for the last time two days ago. I don't believe any more water will increase yield at this time. Harvest should take place within a month, I am looking forward to harvest, and so some data should be included with the third report.

At harvest time, all three trials were harvested in a timely fashion. Yields were very good at EREC, where it was irrigated, above average at Simpson Station, and just average at Pee Dee, where a late dry spell and the later planting affected the yields to be off some. However, trends in yields between the treatments were all similar, so I believe we have had a good trial this year.

Edisto REC Trial

Row Width	Average Yield
7.5	70.87
15	75.67
22.5	65.54
30	55.41
38	48.74

Row Width (in)	Planting Population	Average Dry Yield
7.5	112000	0.00
7.5	127000	65.83
7.5	142000	71.74
7.5	157000	76.42
15	112000	78.51
15	127000	78.82
15	142000	51.68
15	157000	0.00
22.5	112000	66.12
22.5	127000	63.50
22.5	142000	62.36
22.5	157000	70.15
30	112000	56.13
30	127000	59.19
30	142000	53.64
30	157000	52.68
38	112000	48.32
38	127000	47.43
38	142000	49.52
38	157000	49.70

As you can see above, we did have a problem with our drill, a brace actually broke and it affected 3 rows on the drill and with two tractors in the field there were several plots planted before the problem was realized. We did have to throw out two treatments in this trial.

Pee Dee REC Trial

Row Width	Ave Yield
7.5	28.14
15	33.04
22.5	25.67
30	23.21
38	25.92

Row Width	Planting Population	Average Dry Yield
7.5	112000	27.71
7.5	127000	24.86
7.5	142000	30.78
7.5	157000	29.21
15	112000	33.34
15	127000	28.77
15	142000	37.09
15	157000	32.95
22.5	112000	23.90
22.5	127000	28.83
22.5	142000	19.93
22.5	157000	30.02
30	112000	21.08
30	127000	18.20
30	142000	29.11
30	157000	24.45
38	112000	18.66
38	127000	29.07
38	142000	27.75
38	157000	28.18

I spoke at the Pee Dee field day about the late planting of the trial and how it may give us a different outcome because of the difference in day length of trial. However even though the yields were off, the trends between the treatments were very similar to the other two locations.

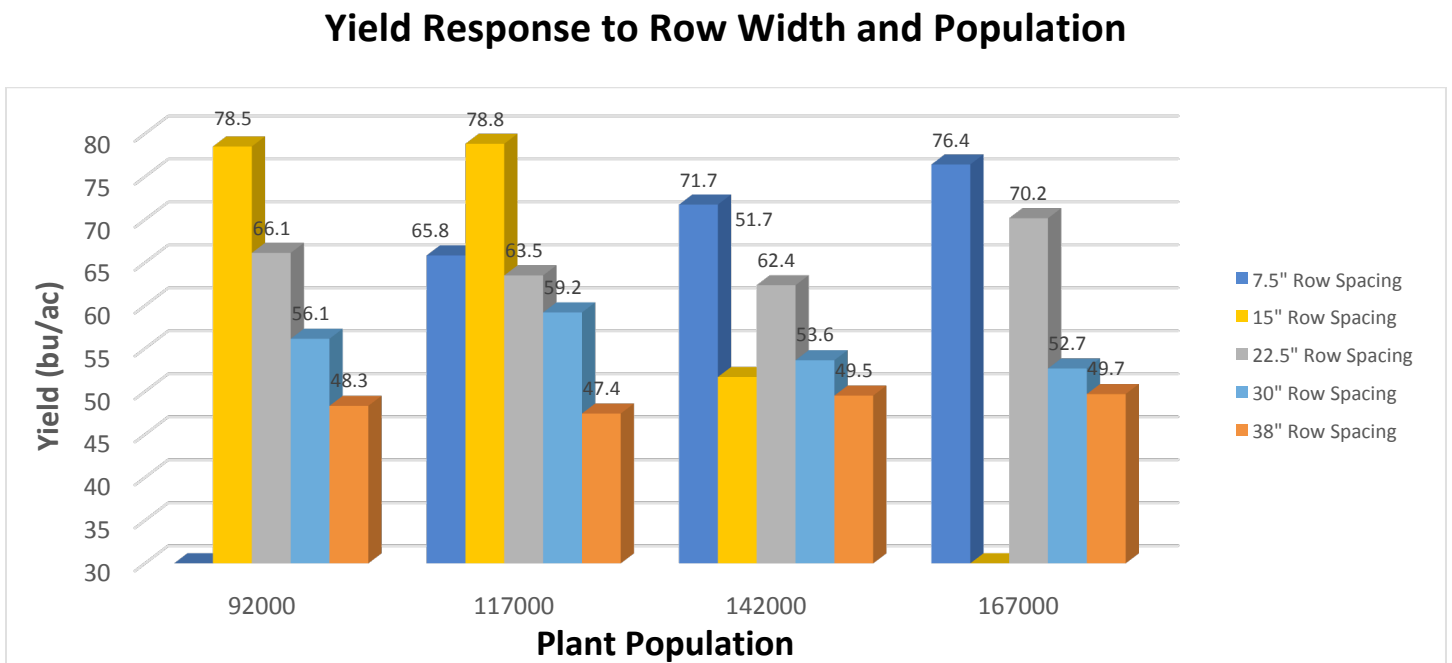
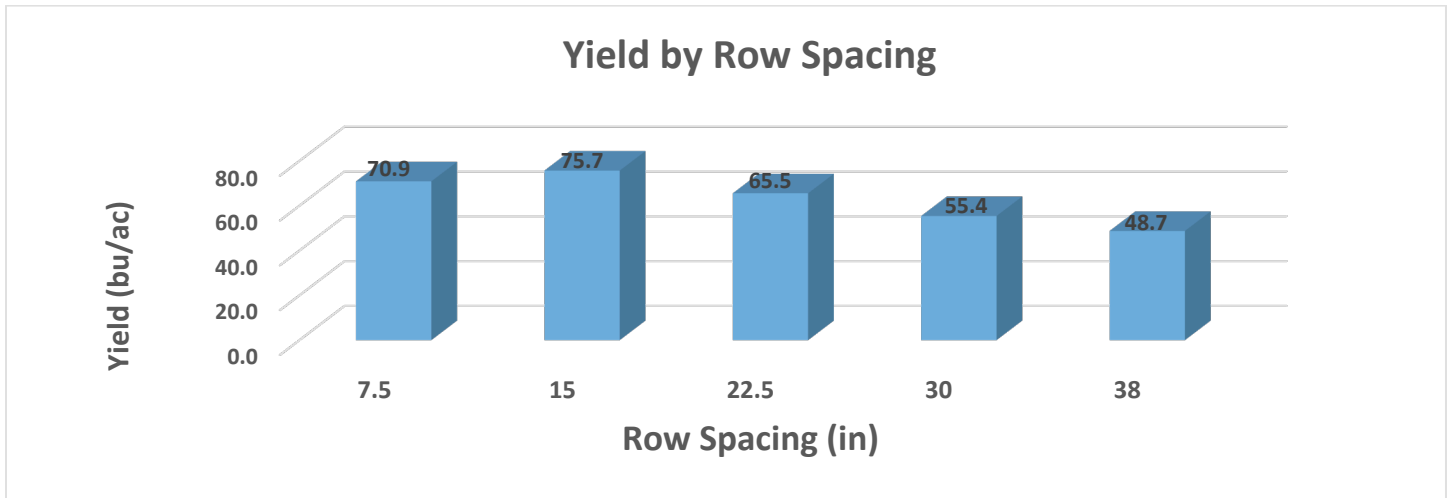
Simpson Station Trial

Row Width	Average Yield
7.5	44.74
15	43.98
22.5	42.58
30	34.44
38	30.03

Row Width	Planting Population	Average Yield
7.5	112000	39.24
7.5	127000	42.19
7.5	142000	44.05
7.5	157000	53.47
15	112000	45.72
15	127000	43.07
15	142000	43.56
15	157000	43.56
22.5	112000	37.94
22.5	127000	42.12
22.5	142000	48.92
22.5	157000	41.34
30	112000	28.84
30	127000	34.93
30	142000	38.46
30	157000	35.52
38	112000	31.91
38	127000	25.48
38	142000	31.06
38	157000	31.68

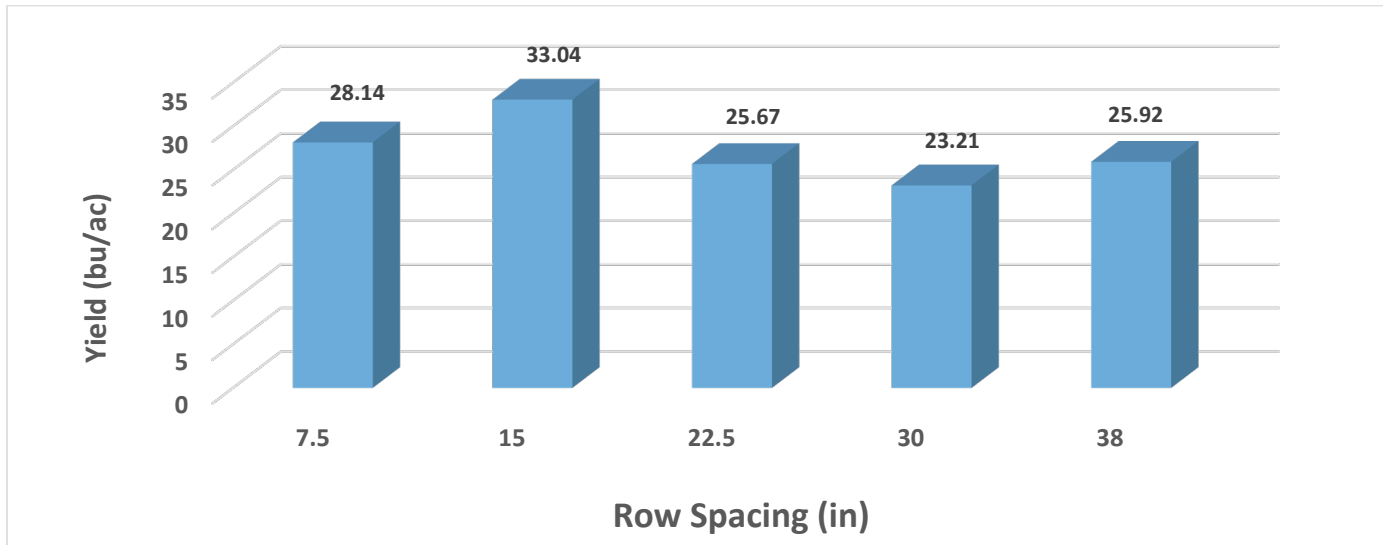
The trial in the Upstate at Simpson Station looks as if the narrower the row spacing the better. As wide as 30 inches would be losing yield. We were fortunate to have good stands, but I know a row planter usually gets a better stand over most years.

The data at Edisto was missing the 15" row spacing at 167K seeding and also the 7.5" row spacing at 92K seeding population. Overall, the trial turned out well, just a little problem at planting cost some data but overall good data was achieved. The row spacing data is sound, there is plenty points taken, even with the missing data sets. The 15" spacing yielded overall the best of the 5 row spacings in this trial. The popular 30" spacing, used on many farms in SC, yielded best at 117k seed population. Again as a reminder this was the only trial that was irrigated. Yields were substantially higher at the EREC site because of the irrigation.

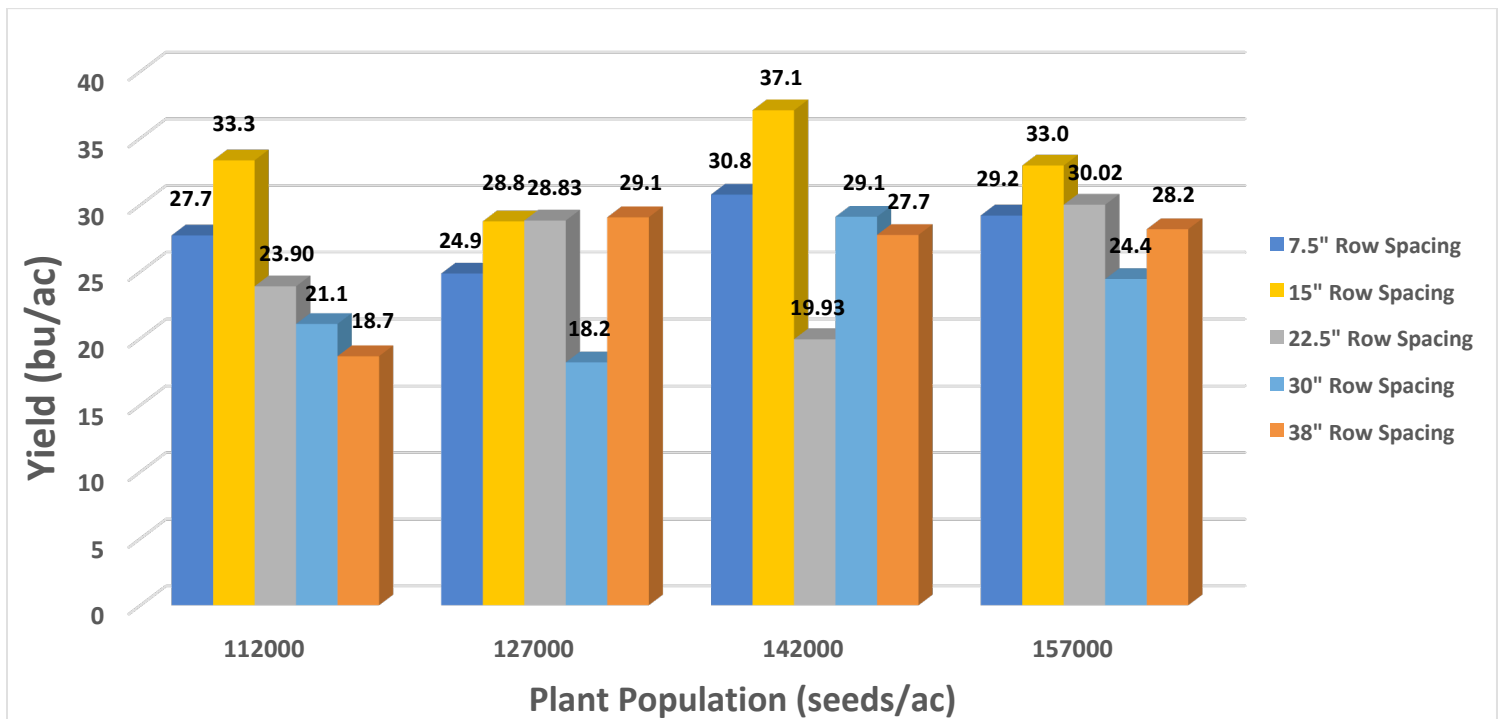


At Pee Dee, the trial turned out well considering it was a little later to be planted than originally planned. The popular 30" spacing yielded best at 142k seed population. A 15" row spacing was by far a better treatment compared to the other 4 treatments.

Yield Response to Row Spacing

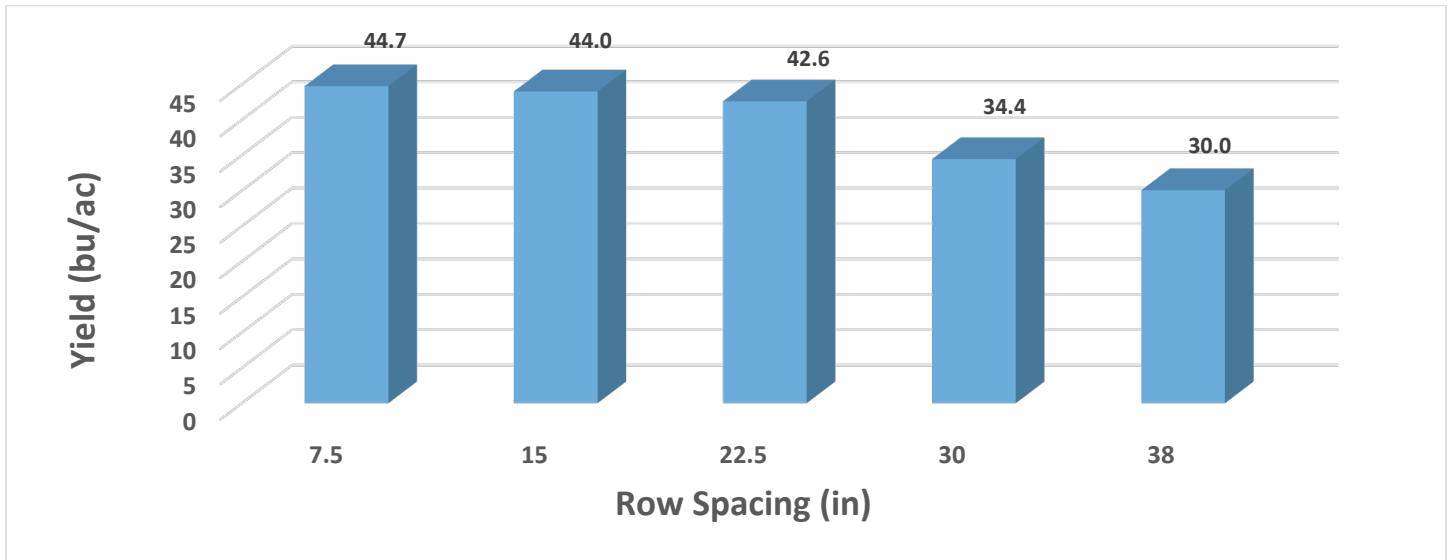


Yield Response to Row Width and Population

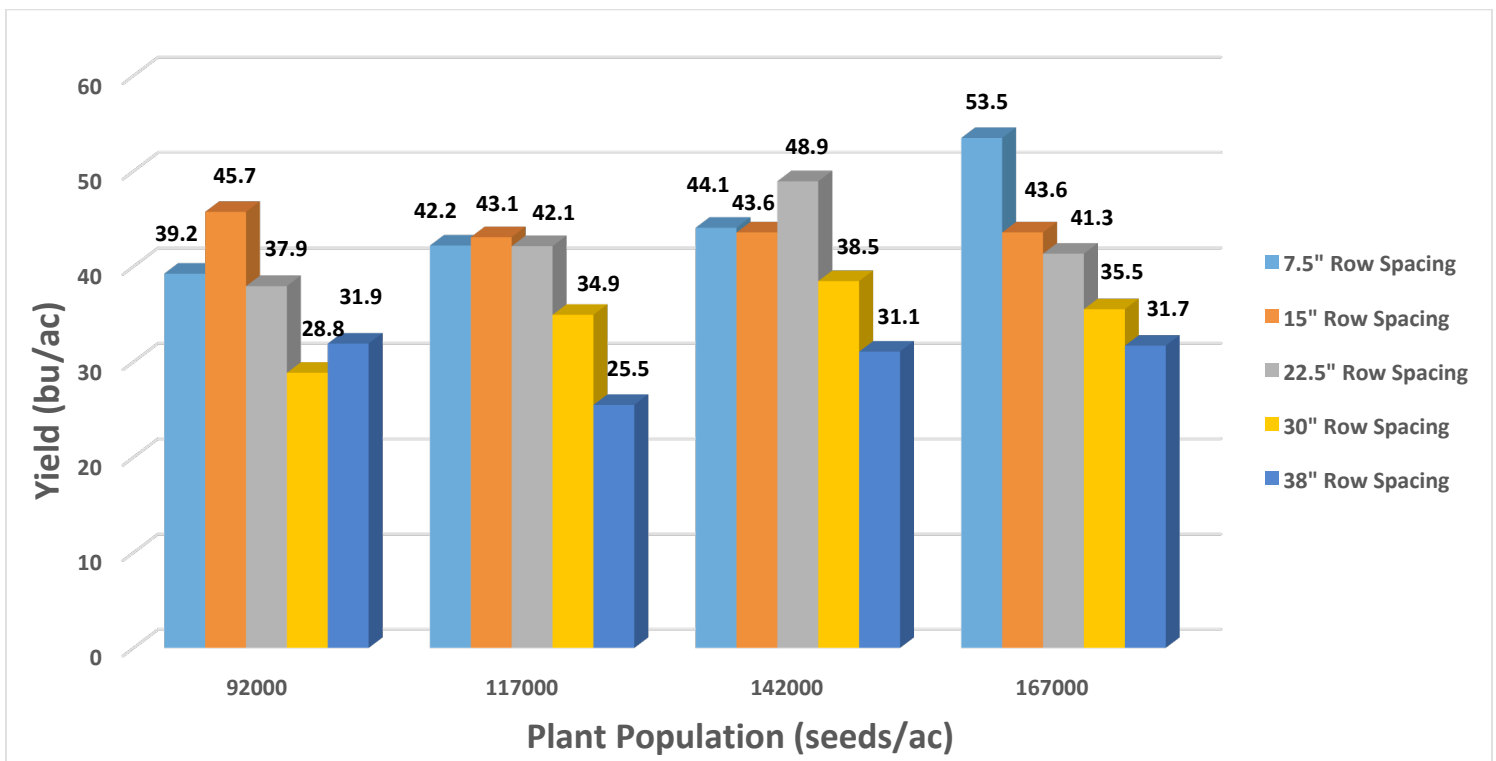


At Simpson Station, not much difference in the yields of 3 row spacings of 7.5, 15, and 22.5". The overall best yield was drilled at 7.5" with a plant population of 167k. The popular 30" spacing peaked its yield at 142k seed population. This trial was planted on time and yields turned out well despite a late dry spell during the growing season. However, rains came in time to stick pods and make a good trial out of the effort.

Yield Response to Row Spacing

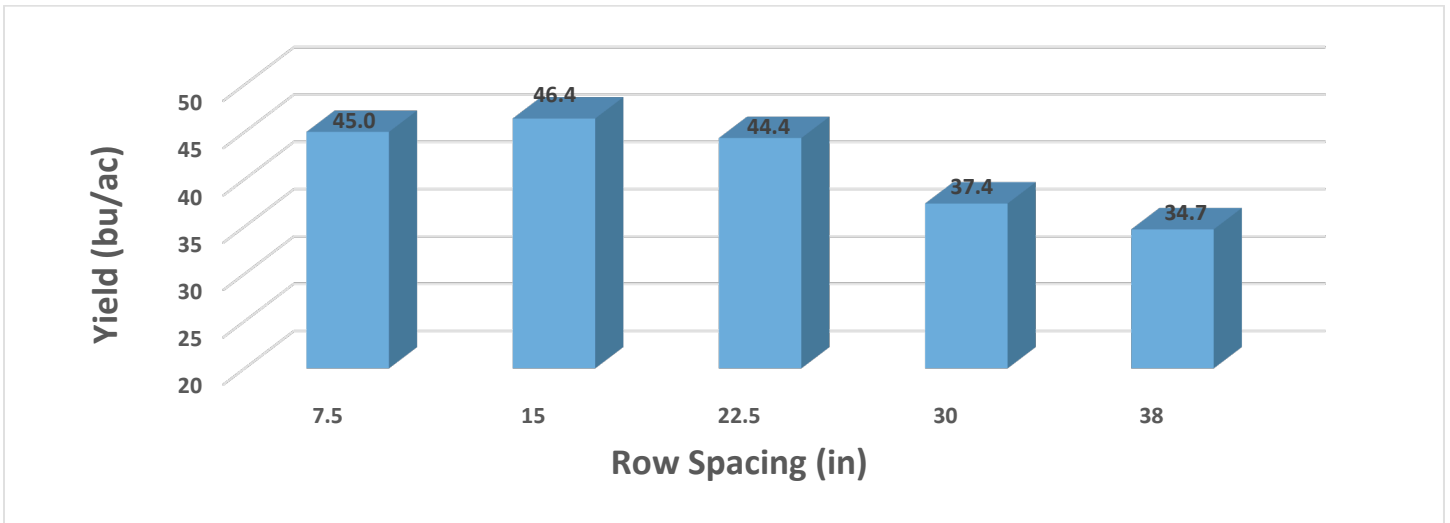


Yield Response to Row Width and Population



This data was presented at all winter/spring soybean production meetings. It was also presented at all three field days at each experiment station and as always, the SC Soybean Board was recognized. As always, these trials prompt good questions and commentary. The last graphs I will present is what these trial results look like when they are averaged together. The averages really smooth out and the data looks even more impressive. When looking at all three trials, 15" row spacing at 142k seed spacing, led all treatments.

Yield by Row Spacing



Yield Response to Row Width and Population

