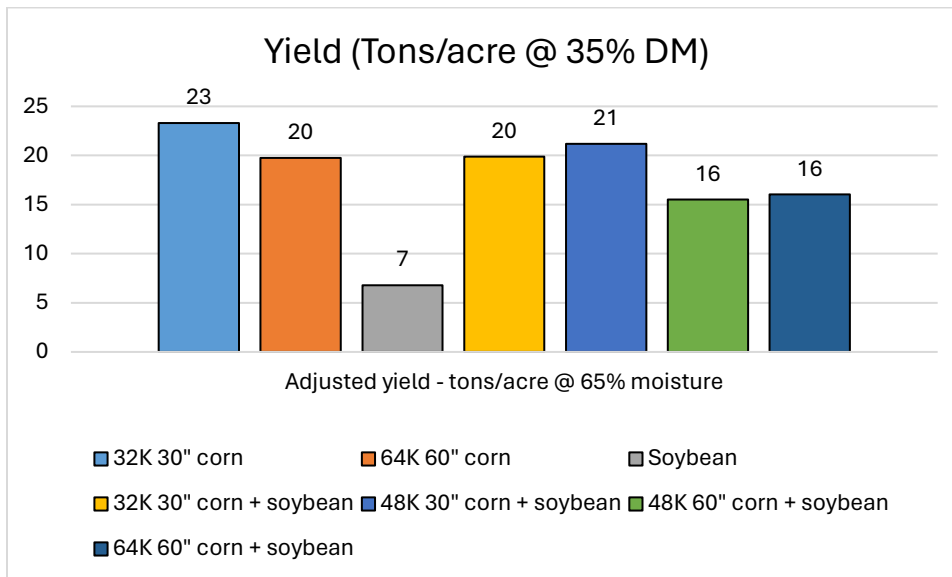


Results (Yr 1)

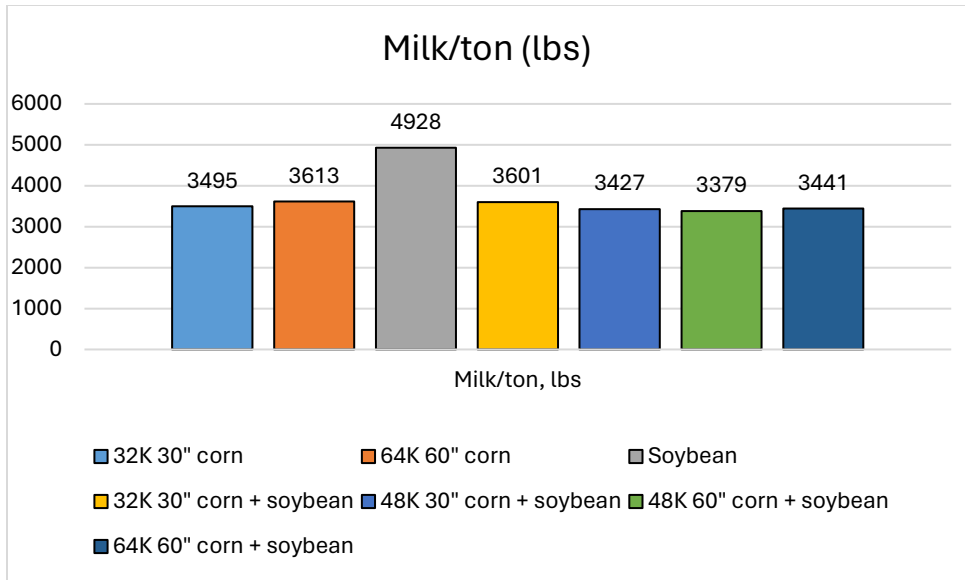
Treatment averages	Planter pop for corn	Actual corn plants/acre
32K 30" corn control	32K	32K
32K 30" corn + soybean	32K	32K
64K 60" corn	64K	32K
64K 60" corn + soybean	64K	32K
48K 30" corn + soybean	48K	48K
48K 60" corn + soybean	48K	24K

Yield

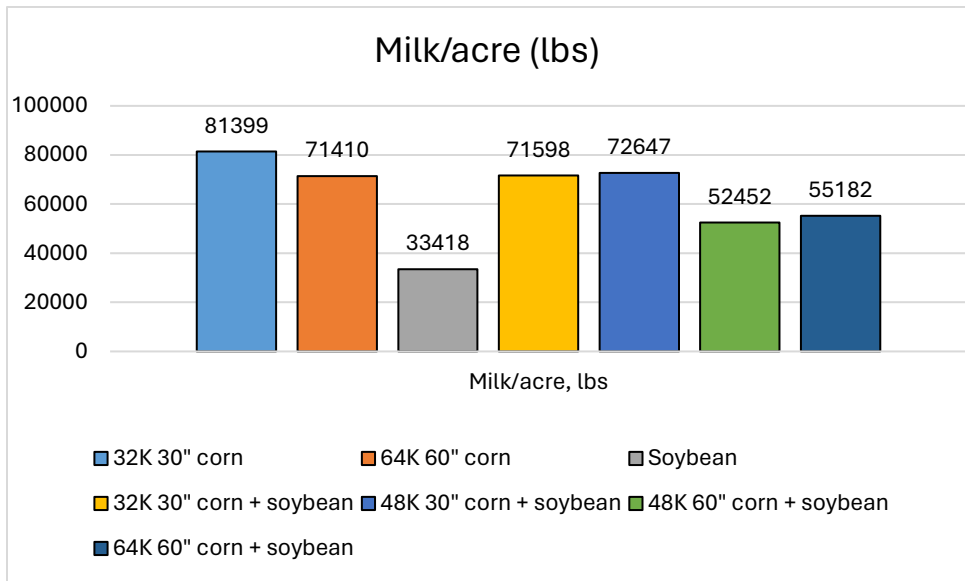
The 32K 30" corn only yielded the greatest silage, with 23 tons/acre at 35% dry matter. The next highest treatments were 48K and 30K corn in 30" rows + soybean at ~20 tons/acre. The 48K and 64K 60" corn + soybean yielded the least forage.



The soybean only yielded only 7 tons/acre at 35% dry matter, but had the highest milk/ton at 4,928 versus ~3,500 milk/ton for all corn and intercropped systems. Neutral detergent fiber digestibility (NDFd 48) was much greater for the soybean only (68%) than the corn only or corn + soybean intercrops (51-54%).



The 32K 30" corn only gave the best milk/acre with 81,399 lbs/acre, which means that the best land use efficiency and nutrient/acre was the standard corn. The next best intercrop was the 32k and 48K 30" corn + soybeans at ~72,000 lbs/acre.



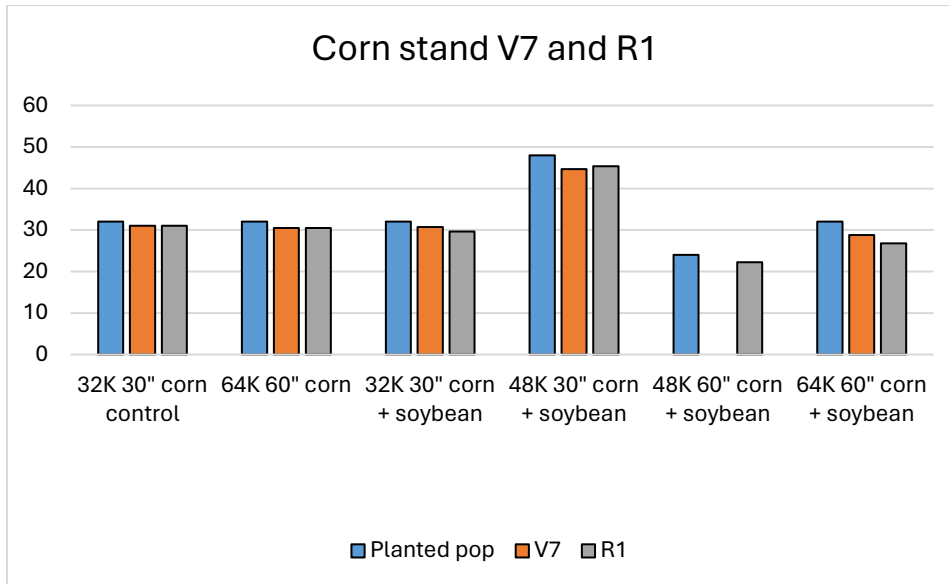
Stage/Maturity

No noticeable differences in maturity were observed during the growing season, except for the 64K 60" corn + soybean which lagged.

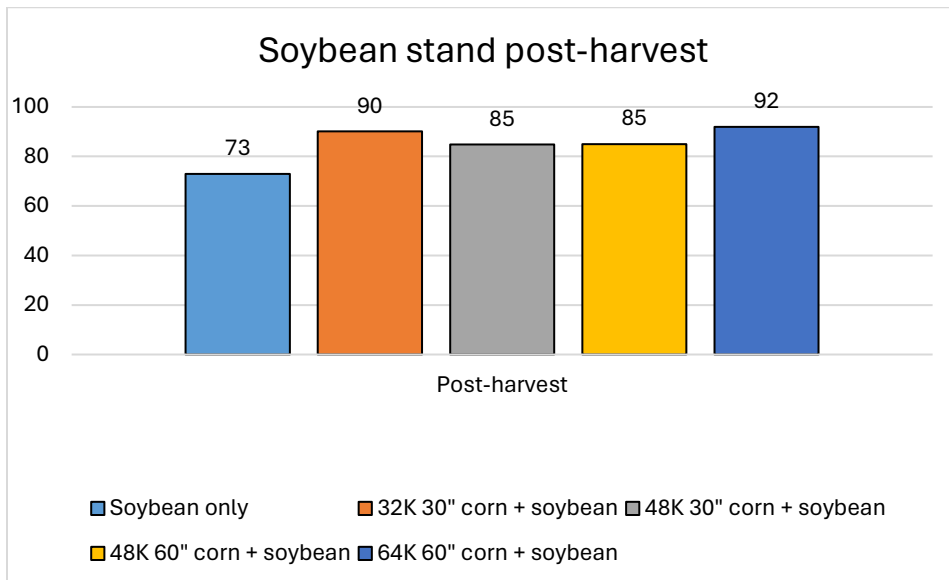
Date	Corn stage averages	Soybean stage averages
6.2.23	V3	VC
6.10.23	V5	V2
6.28.23	V7	V7
7.13.23	V10	R1
8.16.23	R2	R5.5

Stand/Plant population

While corn stand numbers were pretty consistent throughout the growing season, the 64K 60" corn + soybean had the biggest decrease in stand with 16% less plants/acre at harvest.

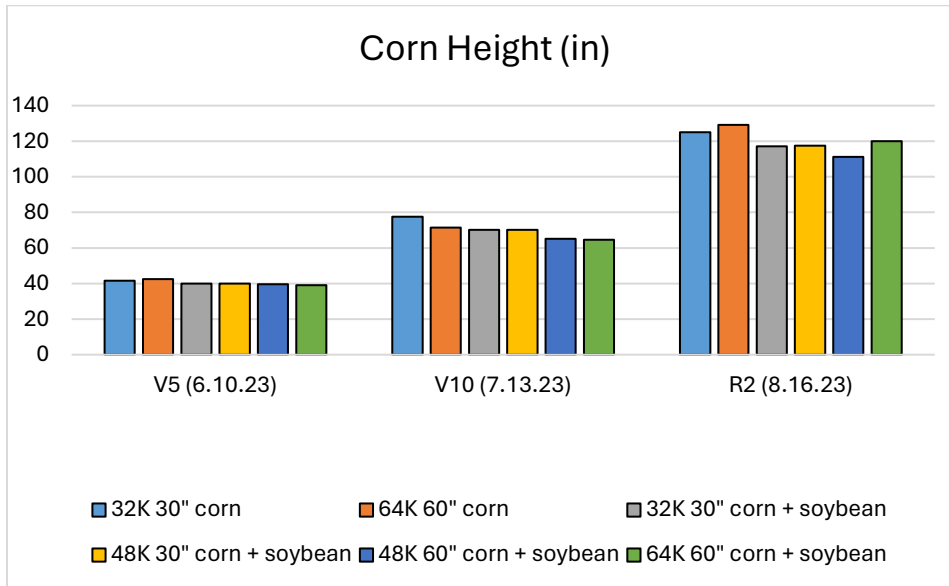


Soybean plant population was greater when intercropped with corn, and less in the soybean only stand. However, soybean plants in the soybean only stand were far more robust than the intercropped soybeans. Intercropped soybean especially had smaller stalk diameter and were much spindlier throughout the season.



Height

The corn in the intercropped corn treatments was shorter than either corn only treatment. The 64K 60" corn only was the tallest corn treatment and one of the two lowest yielding treatments.



Similar to the corn only treatment, the soybean only treatment was tallest among soybean treatments. The 60" corn + soybean treatments were the next tallest soybean treatments.

