

2017 B.E.I. Corn Yield Survey

Observations & Conclusions

1. 2017 adjusted corn yield will be slightly above the 5 year average of 202.50 BPA based on a sampling of 110 fields (220 tests=660 ears).
2. The kernel count per ear at 557 kernels is above the 5 year average (528 kernels per ear) due to good pollination weather. There is some very minor tipping back of the ears. The higher populations this year in the later planted corn may be some of the reason for the minor tipping back. Our tour revealed we have 2 crops of corn distinctly different. The early planted crop has populations around 29000 - 30000 and the later planted crop has populations near 32000 -34000.
3. 52% of the tour participants rated the early planted corn as being the best.
4. 25% of the tour participants concluded that the crop would be mature (black layer) by Sept 1st. 2 out of 3 of the participants also concluded that additional rains would add yield to the crop.
5. While seeding rates were mostly unchanged, wet and cool spring seeding conditions resulted in early season plant populations to be reduced back about 2000 to 2500 plants per acre. These plant populations translated into a lower ear count . We recorded a 31120 average ear population, which is 1519 less population than last year and 400 less than the five year average. Also we found again this year a few barren stalks although not significant.
6. Corn on corn in most instances will yield a little less than corn on beans.
7. There were, to note, little to no fields that revealed a viable second ear in the measured distance. This was contrary to what we all see on the outside of the fields. Outside rows prove to be deceiving almost every year.
8. Kernel weights were heavier compared to the 5 year average and very similar to 2011 crop.
9. The average number of rows remained nearly identical to last year and 1/2 row above 5 year average. (see attached summary)
10. The average ear length in kernels decreased approximately 3 kernels per row behind last year and 1 above the 5 year average. (see attached summary)
11. The stalk quality seems to be good to excellent. Plant disease generally appears to be minimal although there was some minor instances of gray leaf spot.
12. Industry standard for estimating yield includes a factor of 90000 kernels per bushel assumption. We have what I suggest is a heavier than normal weight kernel based on the average ear weights divided by average kernel count per ear. Based on that observation I have adjusted the factor in the calculation to 82500 kernels per bushel (below the 5 year average) from 90000. The 110 scorecards recorded an average yield of 192.37 BPA (raw yield @ 90000 kernels) with an adjusted yield of 209.86 BPA (82500 kernels). The adjusted yield is 30 bushels below last years actual yield or a 12.6% decrease.

SUMMARY OF 2017 B.E.I. CORN YIELD TOUR

<u>AREA</u>	<u>RANGES</u>	<u>AVERAGE YIELD</u>	<u>AVERAGE POPULATION</u>	<u>AVERAGE # OF ROWS</u>	<u>AVERAGE KERNELS LONG</u>	<u>AVERAGE EAR WEIGHT LBS</u>	<u>NUMBER OF FIELDS SAMPLED</u>	<u>TOTAL SAMPLES TAKEN</u>	<u>EARS SAMPLED</u>
Congerville/Carlock/Danvers	147.46 - 218.54	183.85	31090	16.38	32.64	0.658	22	44	132
Deer Creek/Morton	156.44 - 246.49	197.97	30950	16.61	35.01	0.684	37	74	222
Goodfield	149.96 - 208.97	187.37	31170	16.22	33.44	0.654	12	24	72
Mackinaw/Minier	153.31 - 229.00	<u>193.42</u>	<u>31790</u>	<u>16.45</u>	<u>33.47</u>	<u>0.645</u>	<u>39</u>	<u>78</u>	<u>234</u>
AVG RAW YIELD (Standard 90,000 seeds/BU)		192.37	31120	16.46	33.81	0.662	110	220	660
AVERAGE ADJUSTED YIELD ASSUMING 82500 SEEDS PER BUSHEL BASED ON AVERAGE KERNEL WEIGHTS		209.86							
ACTUAL YIELD									

SUBJECTIVE SURVEY (of Tour Participants)

1) SOIL MOISTURES WERE:	52% Poor	48% Good	0% Excellent
2) STALK QUALITY:	17% Poor	73% Good	10% Excellent
3) WILL THE CORN CROP BE MATURED(BLACK LAYERED) BY SEPTEMBER 1, 2016?	25% Yes	75% No	
4) WOULD ADDITIONAL RAIN ADD YIELD TO CORN CROP?	63% Yes	37% No	
5) PARTICIPANTS RATES THE CROP:	Best	Early	52%
		Late	10%
		Same	38%