

2018 B.E.I. Corn Yield Survey Observations & Conclusions

1. 2018 adjusted corn yield will be slightly above the 5 year average of 219.34 BPA based on a sampling of 117 fields (234 tests=702 ears).
2. The kernel count per ear at 568 kernels is slightly above the 5 year average (559 kernels per ear) due to good pollination weather. There is some minor tipping back of the ears. The higher populations this year may be some of the reason for the minor tipping back.
3. 50% of the tour participants rated the early planted corn as being the best.
4. 69% 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, moderate spring seeding conditions resulted in early season plant populations to be very good. These plant populations translated into a higher ear count than normal. We recorded a 32350 average ear population, which is 1230 more population than last year and 340 more than the five year average. We found very few barren stalks this year.
6. Once again the corn on corn in most instances will yield less than corn on beans.
7. There were 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 significantly lighter than last year, but heavier compared to the 5 year average and very similar to 2016 crop.
9. The average number of rows increased $\frac{1}{2}$ a row from last year and $\frac{1}{2}$ row above 5 year average. (see attached summary)
10. The average ear length in kernels remained relatively the same from last year and 1 kernel below the 5 year average. (see attached summary)
11. The stalk quality seems to be good to excellent. Plant disease appeared in nearly every field surveyed and mostly 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 slightly 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 81000 kernels per bushel (below the 5 year average) from 90000. The 117 scorecards recorded an average yield of 203.84 BPA (raw yield @ 90000 kernels) with an adjusted yield of 226.49 BPA (81000 kernels). The adjusted yield is 7 bushels below last years actual yield (232.73) for a 3.0% decrease.

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SUMMARY OF 2018 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	145.99 - 221.37	190.62	32220	16.73	31.85	0.601	27	54	162
Deer Creek/Morton	166.25 - 243.51	208.69	32780	16.87	34.08	0.642	51	102	306
Goodfield	167.95 - 233.84	205.53	31260	17.13	34.69	0.661	21	42	126
Mackinaw/Minier	181.75 - 262.02	<u>207.96</u>	<u>32640</u>	<u>16.96</u>	<u>33.85</u>	<u>0.665</u>	<u>18</u>	<u>36</u>	<u>108</u>
AVG RAW YIELD (Standard 90,000 seeds/BU)		203.84	32350	16.89	33.64	0.639	117	234	702
AVERAGE ADJUSTED YIELD ASSUMING 81000 SEEDS PER BUSHEL BASED ON AVERAGE TOUR KERNEL WEIGHT		226.49							
ACTUAL YIELD									

SUBJECTIVE SURVEY (of Tour Participants)

1) SOIL MOISTURES WERE:	38% Poor	56% Good	6% Excellent
2) STALK QUALITY:	6% Poor	88% Good	6% Excellent
3) WILL THE CORN CROP BE MATURED(BLACK LAYERED) BY SEPTEMBER 1, 2018?	69% Yes	31% No	
4) WOULD ADDITIONAL RAIN ADD YIELD TO CORN CROP?	69% Yes	31% No	
5) PARTICIPANTS RATES THE CROP:	Best	Early	50%
		Late	9%
		Same	41%