

# 2016 BEI Corn Yield Survey

## Observations & Conclusions

1. 2016 corn crop will be above the 5 year average of 193 BPA based on a sampling of 128 fields (256 tests=768 ears).
2. The kernel count per ear at 601 kernels is above the 5 year average (506 kernels per ear) due to good pollination weather. There is some tipping back of the ears. The higher populations this year and mid season heat and warm nights may be some of the reason for the moderate tipping back.
3. 84% of the tour participants rated the early planted corn as being the best.
4. 72% of the tour participants concluded that the crop would be mature (black layer) by Sept 1<sup>st</sup>. 3 out of 5 of the participants also concluded that additional rains would add yield to the crop.
5. While seeding rates were mostly unchanged, spring seeding conditions allowed for early season plant populations to be at a record. These record plant populations translated into the highest ear count in our 21 year tour history. We recorded a 32639 average ear population, but also found again this year a few barren stalks although not significant.
6. Corn on corn in most instances will yield same as 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 a little lighter compared to the 5 year average and very similar to 2013 crop.
9. The average number of rows remained similar to last year and 1/4 row above 5 year average. (see attached summary)
10. The average ear length in kernels increased approximately 5 kernels per row over last year and 5 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 reporting 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 an average (not 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 83000 kernels per bushel (3 ear average) from 90000. The 128 scorecards recorded an average yield of 216.88 BPA (raw yield @ 90000 kernels) with an adjusted yield of 235.17 BPA (83000 kernels).

## SUMMARY OF 2016 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  | 173.84 - 252.49 | 210.22               | 32820                     | 16.27                    | 35.58                       | 0.579                         | 30                              | 60                         | 180                 |
| Deer Creek/Morton  | 166.61 - 288.46 | 223.66               | 32950                     | 16.33                    | 37.56                       | 0.621                         | 54                              | 108                        | 324                 |
| Goodfield  | 191.46 - 240.78 | 213.87               | 32330                     | 16.58                    | 36.26                       | 0.605                         | 20                              | 40                         | 120                 |
| Mackinaw/Minier  | 150.27 - 254.56 | <u>212.45</u>        | <u>31970</u>              | <u>16.24</u>             | <u>36.96</u>                | <u>0.621</u>                  | <u>24</u>                       | <u>48</u>                  | <u>144</u>          |
| AVG RAW YIELD (Standard 90,000 seeds/BU)   |                 | 216.88               | 32639                     | 16.34                    | 36.78                       | 0.609                         | 128                             | 256                        | 768                 |
| AVERAGE ADJUSTED YIELD ASSUMING 83000 SEEDS PER BUSHEL BASED ON AVERAGE KERNEL WEIGHTS |                 | 235.17               |                           |                          |                             |                               |                                 |                            |                     |
| ACTUAL YIELD   |                 |                      |                           |                          |                             |                               |                                 |                            |                     |

### SUBJECTIVE SURVEY (of Tour Participants)

|   |         |          |               |
|---|---------|----------|---------------|
| 1) SOIL MOISTURES WERE:   | 0% Poor | 48% Good | 52% Excellent |
| 2) STALK QUALITY:   | 0% Poor | 52% Good | 48% Excellent |
| 3) WILL THE CORN CROP BE MATURED(BLACK LAYERED) BY SEPTEMBER 1, 2016? | 72% Yes | 28% No   |               |
| 4) WOULD ADDITIONAL RAIN ADD YIELD TO CORN CROP?                      | 60% Yes | 40% No   |               |
| 5) PARTICIPANTS RATES THE CROP:                                       | Best    | Early    | 84%           |
|   |         | Late     | 0%            |
|   |         | Same     | 16%           |