

# RESEARCH FOR RESULTS



## 2017 Seed Company Corn Trials

**OVERVIEW:** This is year 2 of a continuing study conducted by a major seed company utilizing various organic seed treatments on corn vs. an Untreated Check (UTC) and their own highly successful Conventional seed treatment (Hard Chemistries).

**LOCATION:** Four central U.S. states: IOWA, ILLINOIS, INDIANA, KENTUCKY (replaces OHIO AND TENNESSEE from 2016)

**PLOT:** VARIOUS

**HYBRID:** ORGANIC

| 2017 CORN TREATMENT STUDY - ORGANIC - IOWA |                       |                    |       |       |              |       |       |
|--|-----------------------|--------------------|-------|-------|--------------|-------|-------|
| CODE                                       | TREATMENT             | IA<br>Marshalltown |       |       | Mt. Pleasant |       |       |
|  |                       | Rep 1              | Rep 2 | Avg.  | Rep 1        | Rep 2 | Avg.  |
| Treatment #2                               | Hard Chemistries      | 252.9              | 236.0 | 244.5 | 186.3        | 197.1 | 191.7 |
| Treatment #5                               | 1R                    | 288.3              | 244.9 | 266.6 | 208.6        | 197.9 | 203.3 |
| Treatment #3                               | OBT B1 + 1R           | 252.5              | 257.1 | 254.8 | 193.2        | 213.4 | 203.3 |
| Treatment #9                               | 0688869-B             | 228.6              | 247.8 | 238.2 | 202.7        | 207.0 | 204.9 |
| Treatment #16                              | MALiquid2017          | 249.6              | 250.1 | 249.9 | 217.0        | 217.5 | 217.3 |
| Treatment #18                              | TB                    | 238.5              | 245.3 | 241.9 | 188.0        | 199.4 | 193.7 |
| Treatment #11                              | ALB-03                | 243.4              | 240.9 | 242.2 | 196.0        | 205.1 | 200.6 |
| Treatment #4                               | Fast 2 Grow           | 243.2              | 265.8 | 254.5 | 195.7        | 192.5 | 194.1 |
| Treatment #12                              | ALB-02                |                    | 233.8 | 233.8 | 211.1        | 180.0 | 195.6 |
| Treatment #13                              | OBT B1                | 207.6              | 229.9 | 218.8 | 217.9        | 227.4 | 222.7 |
| Treatment #15                              | OBT B2                | 243.4              | 232.4 | 237.9 | 209.5        | 183.5 | 196.5 |
| Treatment #20                              | Buncha Bugs           | 237.4              |       | 237.4 | 179.1        | 203.2 | 191.2 |
| Treatment #8                               | BioMantra Seed+       | 229.1              | 250.7 | 239.9 | 195.4        | 152.4 | 173.9 |
| Treatment #19                              | RootShield Seed Treat | 234.4              | 239.3 | 236.9 | 217.1        | 175.1 | 196.1 |
| Treatment #10                              | ASCO II               | 234.2              | 238.7 | 236.5 | 208.8        | 179.4 | 194.1 |
| Treatment #7                               | RC22017               | 255.5              | 231.5 | 243.5 | 187.4        | 197.3 | 192.4 |
| Treatment #14                              | OBT B3                |                    | 284.4 | 284.4 | 179.8        | 145.9 | 162.9 |
| Treatment #6                               | Myco Seed Treat       | 245.2              | 236.7 | 241.0 | 180.7        | 170.7 | 175.7 |
| Treatment #17                              | GSB                   | 244.4              | 232.8 | 238.6 | 204.4        | 192.0 | 198.2 |
| Treatment #1                               | UTC                   | 195.3              |       | 195.3 | 210.2        | 217.6 | 213.9 |
| MEAN                                       |                       |                    |       | 237.0 |              |       | 192.7 |
| CV   |                       |                    |       | 5.8   |              |       | 7.5   |
| LSD  |                       |                    |       | 29.3  |              |       | 30.9  |

**SUMMARY:**  
 SoilBiotics Organic 1r – Seed Treatment = (Marshalltown) 2<sup>nd</sup> of 20; 112% of Mean Avg., +71 Avg. bu/A vs. Check. (Mt. Pleasant) Tie 5<sup>th</sup> of 20; 106% of Mean Avg., +11 Avg. bu/A vs. Check.

| 2017 CORN TREATMENT STUDY - ORGANIC - ILLINOIS |                       |        |       |       |
|--|-----------------------|--------|-------|-------|
| CODE   | TREATMENT             | IL     |       |       |
|  |                       | Seneca |       |       |
|  |                       | Rep 1  | Rep 2 | Avg.  |
| Treatment #2                                   | Hard Chemistries      | 234.2  | 224.3 | 229.3 |
| Treatment #5                                   | 1R                    | 236.2  | 225.1 | 230.7 |
| Treatment #3                                   | OBT B1 + 1R           | 232.5  | 227.7 | 230.1 |
| Treatment #9                                   | 0688869-B             | 229.3  | 230.1 | 229.7 |
| Treatment #16                                  | MALiquid2017          | 225.1  | 200.9 | 213.0 |
| Treatment #18                                  | TB                    | 236.6  | 239.2 | 237.9 |
| Treatment #11                                  | ALB-03                | 217.9  | 219.6 | 218.8 |
| Treatment #4                                   | Fast 2 Grow           | 223.4  | 204.1 | 213.8 |
| Treatment #12                                  | ALB-02                | 197.1  | 213.0 | 205.1 |
| Treatment #13                                  | OBT B1                | 215.6  | 231.0 | 223.3 |
| Treatment #15                                  | OBT B2                | 231.1  | 222.6 | 226.9 |
| Treatment #20                                  | Buncha Bugs           | 226.7  | 229.5 | 228.1 |
| Treatment #8                                   | BioMantra Seed+       | 243.1  | 215.8 | 229.5 |
| Treatment #19                                  | RootShield Seed Treat | 216.4  | 226.8 | 221.6 |
| Treatment #10                                  | ASCO II               | 229.1  | 223.4 | 226.3 |
| Treatment #7                                   | RC22017               | 213.7  | 231.9 | 222.8 |
| Treatment #14                                  | OBT B3                | 216.7  | 188.0 | 202.4 |
| Treatment #6                                   | Myco Seed Treat       | 234.1  | 233.4 | 233.8 |
| Treatment #17                                  | GSB                   | 218.4  | 213.3 | 215.9 |
| Treatment #1                                   | UTC                   | 210.9  | 236.4 | 223.7 |
| MEAN   |                       |        |       | 221.6 |
| CV   |                       |        |       | 4.6   |
| LSD  |                       |        |       | 21.5  |

**SUMMARY:**

SoilBiotics **Organic 1r – Seed Treatment** = 3<sup>rd</sup> of 20; 104% of Mean Avg., +9 Avg. bu/A vs. Check.

| 2017 CORN TREATMENT STUDY - ORGANIC - INDIANA |                       |         |       |       |
|---|-----------------------|---------|-------|-------|
| CODE  | TREATMENT             | IN      |       |       |
|   |                       | Bourbon |       |       |
|   |                       | Rep 1   | Rep 2 | Avg.  |
| Treatment #2                                  | Hard Chemistries      | 259.0   | 239.3 | 249.2 |
| Treatment #5                                  | 1R                    | 210.0   | 216.8 | 213.4 |
| Treatment #3                                  | OBT B1 + 1R           | 225.5   | 190.2 | 207.9 |
| Treatment #9                                  | 0688869-B             | 197.2   | 232.2 | 214.7 |
| Treatment #16                                 | MALiquid2017          | 198.1   | 193.6 | 195.9 |
| Treatment #18                                 | TB                    | 209.2   | 223.8 | 216.5 |
| Treatment #11                                 | ALB-03                | 196.5   | 241.1 | 218.8 |
| Treatment #4                                  | Fast 2 Grow           | 221.5   | 225.5 | 223.5 |
| Treatment #12                                 | ALB-02                | 215.5   | 226.5 | 221.0 |
| Treatment #13                                 | OBT B1                | 210.3   | 208.7 | 209.5 |
| Treatment #15                                 | OBT B2                | 233.4   | 223.9 | 228.7 |
| Treatment #20                                 | Buncha Bugs           | 217.5   | 227.6 | 222.6 |
| Treatment #8                                  | BioMantra Seed+       | 221.8   | 222.4 | 222.1 |
| Treatment #19                                 | RootShield Seed Treat | 207.2   | 216.2 | 211.7 |
| Treatment #10                                 | ASCO II               | 188.0   | 209.6 | 198.8 |
| Treatment #7                                  | RC22017               | 195.7   | 232.6 | 214.2 |
| Treatment #14                                 | OBT B3                | 212.0   | 219.1 | 215.6 |
| Treatment #6                                  | Myco Seed Treat       | 225.0   | 187.0 | 206.0 |
| Treatment #17                                 | GSB                   | 202.8   | 207.1 | 205.0 |
| Treatment #1                                  | UTC                   | 193.2   | 215.2 | 204.2 |
| MEAN  |                       |         |       | 213.3 |
| CV  |                       |         |       | 7.2   |
| LSD   |                       |         |       | 32.3  |

**SUMMARY:**

SoilBiotics **Organic 1r – Seed Treatment** = 12<sup>th</sup> of 20; 100% of Mean Avg., 100% Avg. bu/A vs. Check.

## 2017 CORN TREATMENT STUDY - ORGANIC - KENTUCKY

| CODE          | TREATMENT             | KY       |       |       |
|---------------|-----------------------|----------|-------|-------|
|               |                       | Columbia |       |       |
|               |                       | Rep 1    | Rep 2 | Avg.  |
| Treatment #2  | Hard Chemistries      | 232.6    | 190.7 | 211.7 |
| Treatment #5  | 1R                    | 235.0    | 185.8 | 210.4 |
| Treatment #3  | OBT B1 + 1R           | 184.9    | 222.9 | 203.9 |
| Treatment #9  | 0688869-B             | 229.0    | 187.1 | 208.1 |
| Treatment #16 | MALiquid2017          | 189.9    | 239.9 | 214.9 |
| Treatment #18 | TB                    | 178.8    | 217.8 | 198.3 |
| Treatment #11 | ALB-03                | 209.1    | 206.9 | 208.0 |
| Treatment #4  | Fast 2 Grow           | 191.9    | 200.1 | 196.0 |
| Treatment #12 | ALB-02                | 242.1    | 203.2 | 222.7 |
| Treatment #13 | OBT B1                | 182.9    | 212.8 | 197.9 |
| Treatment #15 | OBT B2                | 181.4    | 181.2 | 181.3 |
| Treatment #20 | Buncha Bugs           | 200.9    | 179.9 | 190.4 |
| Treatment #8  | BioMantra Seed+       | 213.9    | 177.8 | 195.9 |
| Treatment #19 | RootShield Seed Treat | 199.4    | 183.8 | 191.6 |
| Treatment #10 | ASCO II               | 190.4    | 207.1 | 198.8 |
| Treatment #7  | RC22017               | 199.9    | 156.3 | 178.1 |
| Treatment #14 | OBT B3                | 181.9    | 184.8 | 183.4 |
| Treatment #6  | Myco Seed Treat       | 179.2    | 179.6 | 179.4 |
| Treatment #17 | GSB                   | 174.2    | 173.1 | 173.7 |
| Treatment #1  | UTC                   | 154.5    | 183.9 | 169.2 |
| MEAN          |                       |          |       | 188.5 |
| CV            |                       |          |       | 13.6  |
| LSD           |                       |          |       | 55.7  |

### SUMMARY:

SoilBiotics **Organic 1r – Seed Treatment** = 4<sup>th</sup> of 20; 112% of Mean Avg., +22 Avg. bu/A vs. Check.

**NOTES:** These tests were conducted strictly for Seed Treatment performance and not conducted in a true restricted Organic program. They were instead conducted utilizing the growers actual normal cropping plans. These included all standard tillage, fertilizer and other input programs, so results are more indicative of “real world” farming.

| 2017 CORN TREATMENT STUDY - ORGANIC - STATE AVERAGES |                       |                       |                    |
|--|-----------------------|-----------------------|--------------------|
| CODE   | TREATMENT             | Replicated<br>Average | Yield<br>% of Mean |
| Treatment #2   | Hard Chemistries      | 225.2                 | 106.9%             |
| Treatment #5   | 1R                    | 224.9                 | 106.8%             |
| Treatment #3   | OBT B1 + 1R           | 220.0                 | 104.5%             |
| Treatment #9   | 0688869-B             | 219.1                 | 104.0%             |
| Treatment #16  | MALiquid2017          | 218.2                 | 103.6%             |
| Treatment #18  | TB                    | 217.7                 | 103.3%             |
| Treatment #11  | ALB-03                | 217.7                 | 103.3%             |
| Treatment #4   | Fast 2 Grow           | 216.4                 | 102.7%             |
| Treatment #12  | ALB-02                | 215.6                 | 102.4%             |
| Treatment #13  | OBT B1                | 214.4                 | 101.8%             |
| Treatment #15  | OBT B2                | 214.2                 | 101.7%             |
| Treatment #20  | Buncha Bugs           | 213.9                 | 101.6%             |
| Treatment #8   | BioMantra Seed+       | 212.2                 | 100.8%             |
| Treatment #19  | RootShield Seed Treat | 211.6                 | 100.5%             |
| Treatment #10  | ASCO II               | 210.9                 | 100.1%             |
| Treatment #7   | RC22017               | 210.2                 | 99.8%              |
| Treatment #14  | OBT B3                | 209.7                 | 99.6%              |
| Treatment #6   | Myco Seed Treat       | 207.2                 | 98.4%              |
| Treatment #17  | GSB                   | 206.3                 | 97.9%              |
| Treatment #1   | UTC                   | 201.3                 | 95.6%              |
| MEAN   |                       | 210.6                 |                    |
| CV   |                       | 7.2                   |                    |
| LSD  |                       | 32.3                  |                    |

**FINAL SUMMARY:** SoilBiotics **Organic 1r – Seed Treatment** placed 2nd overall of 20 seed treatments tested (19 organic), surpassed only by the seed company’s primary Conventional seed treatment (Hard Chemistries), scoring 106.8% of Mean Avg., and a +24 Avg. bu/A vs. Untreated Check over the 4-state study.