



# GET UP

SEED TREATMENT



## 2024 UPDATE

- Concentrated Microbial Formula
- Over 2 Dozen Strains of Versatile and Viable Microbes
- Nodulating Bacteria Included



**GET UP® SEED TREATMENT** is a powerful new technology that utilizes diverse living organisms to improve the initial germ, early growth, and optimized stand of your seed. **GET UP® ST** is a "pro-biotic" treatment added to seed to change the ecology or environment around the germinating seedling bringing health and vitality to the young plant the moment it begins to grow. Additional benefits include nodulating strains of bacteria that form nitrogen-producing nodules on the roots of legume crops like soybeans.

Siderophore (iron magnets) releasing strains in **GET UP® ST** encourage Iron uptake and nodulation to begin as early as emergence producing higher numbers of nitrogen rich producing colonies that improve early color and growth. **GET UP® ST** lives on well into the season in symbiosis with the roots and continues to provide health benefits to plants long after crop protection chemicals have been chemically or microbially degraded. Treat your seed with **GET UP® ST** and treat yourself to the confidence in knowing your seeds have been given the power of life to maximize yield and productivity.



SOYBEAN FIELD TREATED W/ GET UP®



# GETUP<sup>®</sup> MICROBIAL TEAM TECHNOLOGY

SEED TREATMENT

## PLANT GROWTH

### SOIL HEALTH

**MICROBIAL SURFACTANT PRODUCTION:** Improves soil quality, water-retention, and nutrient-holding capacity

**DEGRADATION OF COMPLEX ORGANIC POLYMERS:** Cellulose, Lignin, Chitin, Starch, Waxes & Oils

**PETROLEUM, HYDROCARBON, BIOREMEDIATION:** Oil, Diesel, Gas, Chemical carrier degradation

**PESTICIDE + HERBICIDE BIOREMEDIATION:** Specialized remediation capabilities

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### NUTRIENT EFFICIENCY

**PHOSPHATE SOLUBILIZING MICROBES:**

**FREES** unavailable P for plant uptake

**AMMONIFYING MICROBES:** Converts organic N to ammonia for plant uptake

**POTASSIUM SOLUBILIZING MICROBES:** Convert insoluble K into soluble plant available form

**DIAZOTROPHIC MICROBES:**

Nitrogen fixation, converts atmospheric N into ammonia

**NODULATION:** Nodule-forming Nitrogen-fixing rhizobia

**SIDEROPHORE PRODUCTION:**

Iron-chelating compounds that increase plant available Iron

**SULFUR OXIDIZING:** Convert insoluble sulfur into plant-available form

**ZINC SOLUBILIZATION:** Solubilizes insoluble forms of Zinc for plant uptake

### STRESS MITIGATION

**ETHYLENE REDUCTION:**

ACC Deaminase production, inhibiting Ethylene formation, promoting plant tolerance to stress

**VITAMIN/HORMONE:**

Vitamin production and other compounds that promote plant health and vigor

**VOLATILE COMPOUNDS:**

Production of VOCs, which promote systematic resistance to stress and plant vigor

# PRODUCT ATTRIBUTES

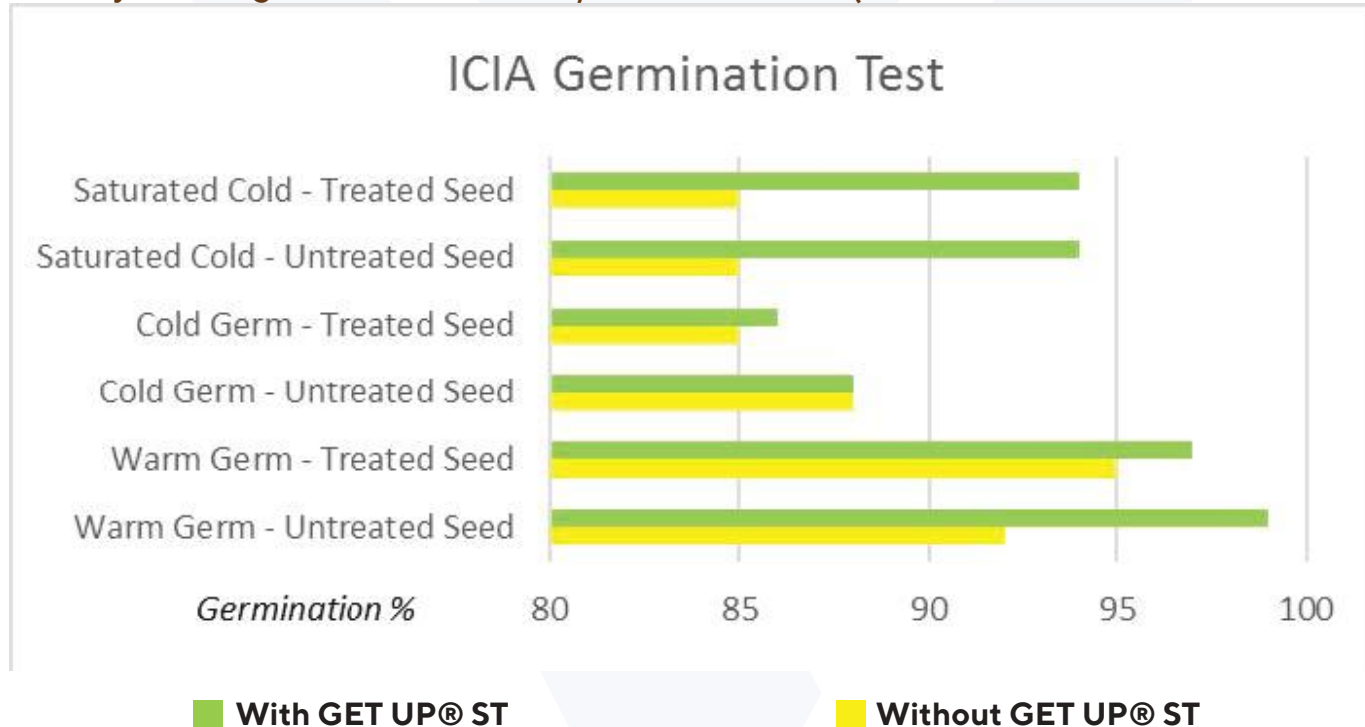
- Improves Germination
- Improves early growth and vigor
- Application window of 90+ days
- Compatible with other products
- Contains nodulating N-fixing inoculant
- Contains other beneficial microbes
- Provides food sources for microbes in blend
- Contains phosphate-releasing technology
- No special replant restrictions
- Produces multiple enzymes around the root
- Contains dozens of strains of microbes
- Contains iron-releasing technologies
- Built specifically to work in high-pH calcareous soils
- No special mixing or agitation required
- No special bag tagging required
- Live the entire season in conjunction with plant roots
- Produces enzymes that fix atmospheric N to soil
- Produce enzymes that degrade cellulose into food
- Produce enzymes that degrade chemicals into food
- Contains Sinorhizobium (Next Gen Rhizobium)
- Contains multiple strains producing chitinase
- Contains strains that work in a wide temp range
- Contains food sources that chelate micronutrients
- Contains strains that work in varying O<sub>2</sub> conditions



# ICIA SOYBEAN GERMINATION TEST

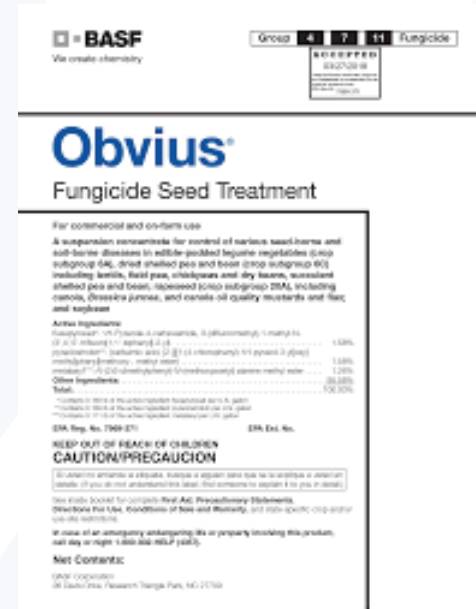
The Indiana Crop Improvement Association, ICIA, performed germination tests for GET UP<sup>®</sup> SEED TREATMENT following their long-established protocols. For over 100 years the ICIA has been a leader in seed certification, seed quality testing, genetic testing, and research. ICIA, a non-profit, self-supporting agency, exists to deliver unbiased, needed services to its member customers.

The results from the tests show enhanced germination with the use of GET UP<sup>®</sup> SEED TREATMENT (detailed below). Tests were performed on both Treated Soybean Seeds (fungicide and inoculant) and Untreated “naked” Soybean Seeds. Not only did seeds treated with GET UP<sup>®</sup> SEED TREATMENT show strong germination in ideal conditions (Warm Germination Test) but particularly seeds treated with GET UP<sup>®</sup> SEED TREATMENT showed significantly better germination in cold/wet conditions (Cold Germination and Saturated Cold Test).



# F + I STABILITY STUDY

GET UP® SEED TREATMENT was blended with Obvius® Fungicide Seed Treatment. Total Aerobic Counts were performed at time zero, 90 days, and 180 days. Total aerobic counts were performed by an independent lab.



Time Zero =  $7 \times 10^8$  (700 million microbes per ml)  
 90 Days =  $2 \times 10^8$  (200 million microbes per ml)  
 180 days =  $9 \times 10^6$  (9 million microbes per ml)

# SOYBEAN SEED TREATMENT TRIAL

ILLINOIS SOYBEAN FIELD TRIAL CONDUCTED BY BECKS INDEPENDENT RESEARCH (2018)

38 VARIOUS SEED TREATMENTS (2 REPS)

GET UP® SEED TREATMENT = 69.4 BPA (#1 out of 38)

BASE = 63.4 (- 6 BPA) | UNTREATED 59.2 (- 10 BPA)

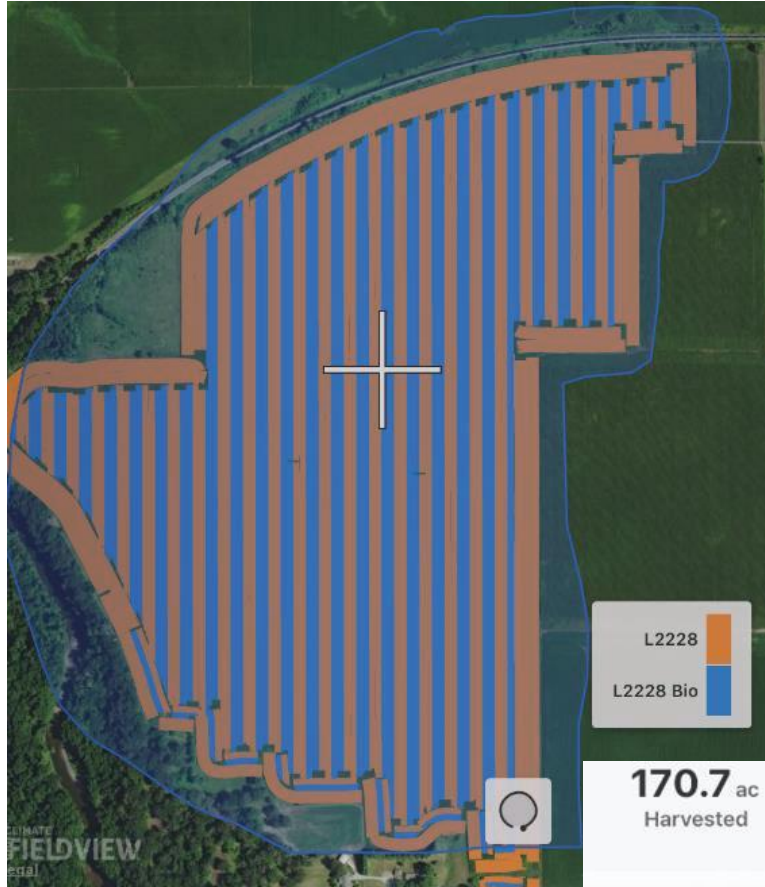
| Base = Metalaxyl + Fludioxonil + Imidacloprid |  | Soybeans 2018 |             |             |
|---|--|---------------|-------------|-------------|
| CODE  | TREATMENT  | IL            |             |             |
|   |  | Neoga         | 1           | 2           |
| <b>Treatment #31</b>                          | <b>Base + Get Up® Seed Treatment</b>               | 72.1          | 66.6        | <b>69.4</b> |
| Treatment #8                                  | Base (1.6 IMD rate) + BIOST Nematicide + VPH       | 74.0          | 64.3        | 69.2        |
| Treatment #25                                 | Base + Headsup + BIOST Nematicide                  | 62.5          | 74.6        | 68.6        |
| Treatment #24                                 | Base + T-methyl + BIOST Nematicide                 | 68.6          | 67.6        | 68.1        |
| Treatment #33                                 | Base + BDx Seed Treatment                          | 73.4          | 62.6        | 68.0        |
| Treatment #14                                 | Lumisena + FST Concept                             | 73.0          | 62.5        | 67.8        |
| Treatment #7                                  | Base (1.6 IMD rate) + ILeVo + BIOST Nematide + VPH | 68.9          | 66.4        | 67.7        |
| Treatment #5                                  | Base (-Imidacloprid) + PonchoVotivo + ILeVo        | 64.8          | 70.2        | 67.5        |
| Treatment #18                                 | Base + DBT 2003                                    | 69.7          | 65.1        | 67.4        |
| Treatment #13                                 | Base (-Imidacloprid) + Lumisena                    | 61.3          | 71.4        | 66.4        |
| Treatment #30                                 | Base + Agra-Rouse                                  | 66.4          | 66.2        | 66.3        |
| Treatment #17                                 | Base + Excalibre SA 18BE_04056WP                   | 61.1          | 71.5        | 66.3        |
| Treatment #9                                  | Base (Duplicate)                                   | 58.7          | 71.6        | 65.2        |
| Treatment #35                                 | Base + AVEO  | 66.0          | 63.6        | 64.8        |
| Treatment #34                                 | Base + UHC Inoculant                               | 71.2          | 58.0        | 64.6        |
| Treatment #27                                 | Base + S 208                                       | 66.7          | 61.6        | 64.2        |
| Treatment #6                                  | Base (low rate F) + Intego Solo                    | 65.3          | 62.9        | 64.1        |
| Treatment #4                                  | Base + ILeVo + VPH                                 | 61.2          | 66.7        | 64.0        |
| Treatment #28                                 | Base + Exp. BC9                                    | 65.1          | 62.7        | 63.9        |
| Treatment #32                                 | Base + N1b-10L ST                                  | 64.0          | 63.1        | 63.6        |
| <b>Treatment #2</b>                           | <b>Base</b>  | <b>64.0</b>   | <b>62.7</b> | <b>63.4</b> |
| Treatment #3                                  | Base + VPH   | 64.1          | 62.2        | 63.2        |
| Treatment #12                                 | Base + BASNem 1                                    | 62.0          | 64.1        | 63.1        |
| Treatment #21                                 | B775 + B798  | 59.6          | 65.8        | 62.7        |
| Treatment #26                                 | Base (1.6floz IMD rate) + BIOST Nematicide         | 64.4          | 60.7        | 62.6        |
| Treatment #19                                 | Base + DBT 2012                                    | 59.8          | 64.4        | 62.1        |
| Treatment #16                                 | Base + Commence                                    | 58.5          | 64.9        | 61.7        |
| Treatment #29                                 | Base + Exp. GX3                                    | 61.0          | 62.3        | 61.7        |
| Treatment #15                                 | Base + F4018                                       | 59.5          | 63.8        | 61.7        |
| Treatment #23                                 | Base + BIOST Nematicide                            | 58.7          | 62.3        | 60.5        |
| Treatment #10                                 | Base + Vibrance                                    | 56.5          | 64.3        | 60.4        |
| Treatment #20                                 | B775   | 61.2          | 58.0        | 59.6        |
| Treatment #22                                 | Base + B798  | 57.4          | 60.9        | 59.2        |
| <b>Treatment #1</b>                           | <b>UTC</b>   | <b>62.5</b>   | <b>55.8</b> | <b>59.2</b> |
| Treatment #38                                 | Base + Root-Tek                                    | 57.1          | 60.9        | 59.0        |
| Treatment #36                                 | Base + AgRho S Boost ELX                           | 59.4          | 57.6        | 58.5        |
| Treatment #37                                 | Base + Biovante XP                                 | 61.2          | 53.2        | 57.2        |
| <b>MEAN</b>                                   |  |               |             | <b>63.8</b> |



# NC IOWA SOYBEAN TRIAL

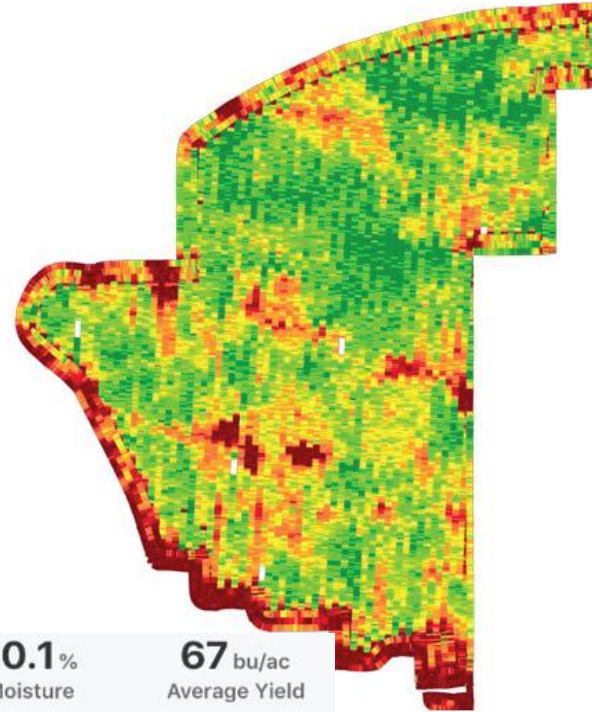
170 ACRES (2018)

24 ROWS EACH | BLUE w/ GET UP® ST | ORANGE WITHOUT  
GET UP® SEED TREATMENT = +5 BPA



Yield • Avg Yield: 67 bu/ac

2018 Soybeans • 172.9 ac



**170.7** ac Harvested      **10.1%** Moisture      **67** bu/ac Average Yield

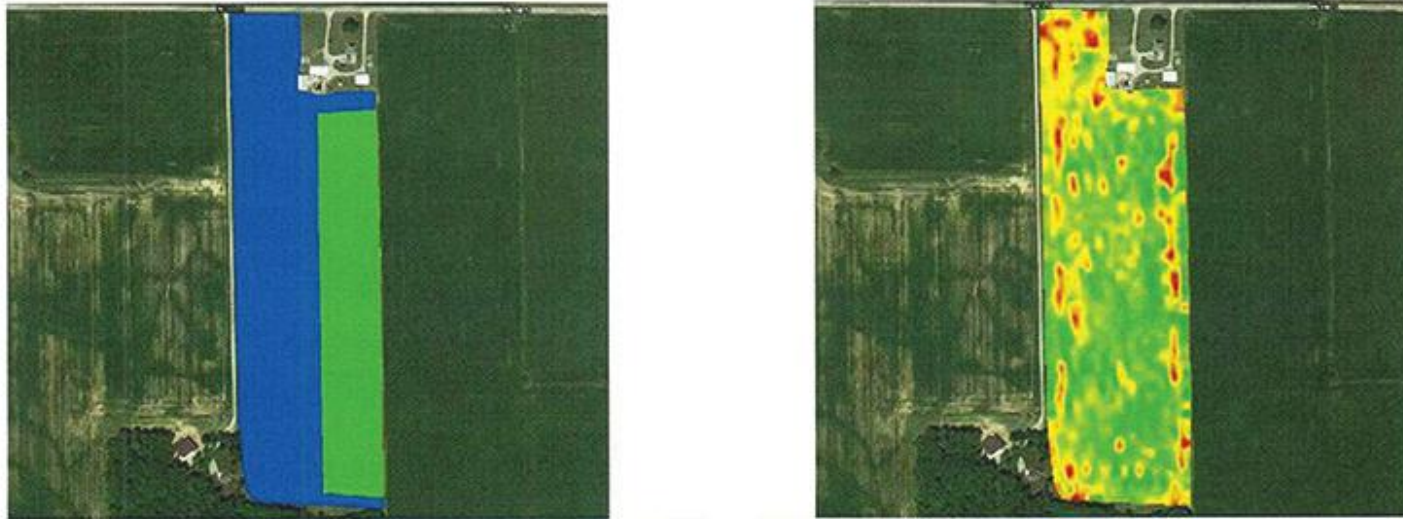
| By Variety                                    | Avg. Yield | Acre   |
|---|------------|--------|
| <span style="color: blue;">●</span> L2228 Bio | 70         | 69.2 > |
| <span style="color: orange;">●</span> L2228   | 65         | 99.8 > |





# INDIANA SOYBEAN TRIAL

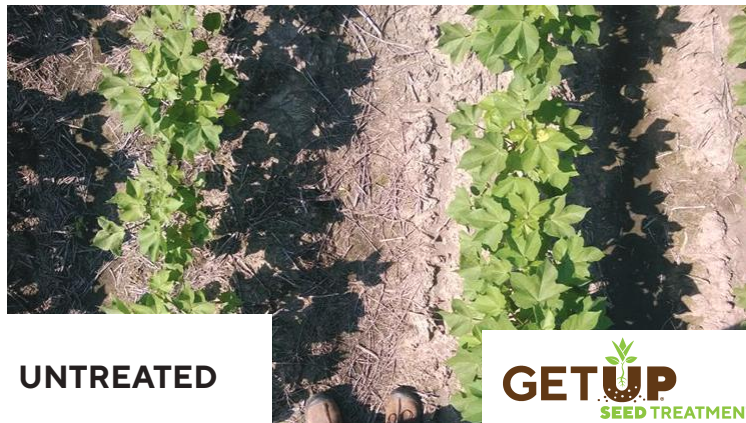
TRIAL CONDUCTED BY FOREFRONT AG SOLUTIONS (2019)  
 YIELD BY MANAGEMENT ZONES  
 FIELD LEVEL MANAGEMENT ZONE DETAIL  
 GROWER: (AC) NE IN: FARM | GRANDMA FIELD: WEST  
 GET UP® SEED TREATMENT = + 4 BPA



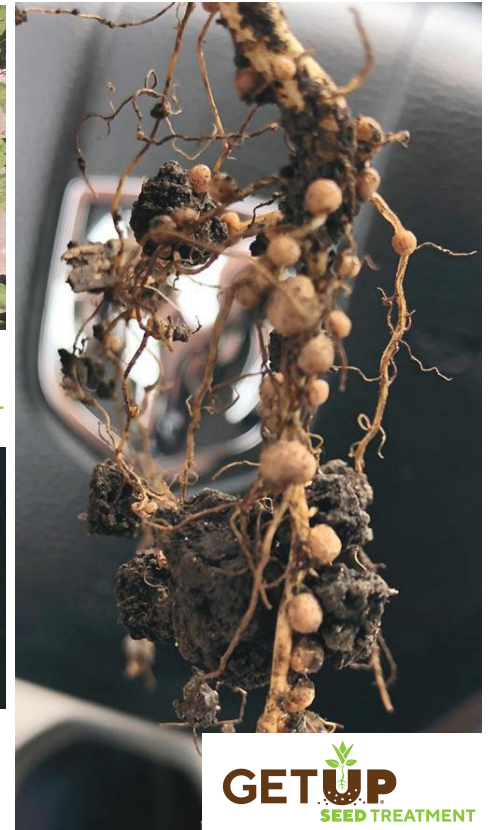
| Zone No      | Mgmt Zone Name                | Range | Zone Name | Data | Avg Moisture% | Avg Yield                    | Total Yield | HarvestAcres | Area  |
|--------------|-------------------------------|-------|-----------|------|---------------|------------------------------|-------------|--------------|-------|
| Zone GET UP® | Seed Treatment Min - Max Test |       | GET UP®   | None | 13.12         | 60.28 bu/ac<br><b>+4 BPA</b> | 683 bu      | 11.33        | 11.37 |
| Zone Normal  | Seed Treatment Min - Max Test |       | Normal    | None | 12.09         | 56.07 bu/ac                  | 1138 bu     | 20.30        | 20.30 |



UNTREATED



UNTREATED



UNTREATED



UNTREATED



GETUP SEED TREATMENT UNTREATED



UNTREATED



Treat your seed with  
**GET UP® SEED TREATMENT**  
and treat yourself to the confidence  
in knowing your seeds have  
been given the power of life to  
maximize yield and productivity.

