

| Trmt. ID | Treatment Code | Company | Form. | Plant Stand 1000plants/ac | Shoot | Root | Nodule | Nodule | Days to | Days to | Test | 1000 | Seeds/ | Seed | Seed | Seed |
|------------|-------------------------|-------------------------------|---------|------------------------------|---------------------|---------------------|------------------|-------------------|---------|---------|-----------------|-------------|--------|--------------|----------|----------------|
| | | | | | Biomass mg/plant | Biomass mg/plant | Mass mg/plant | Number #/plant | Bloom | PM | Weight lb/bu | KWT gram | Pound | Protein % | Oil % | Yield bu/ac |
| 1 | Check | NA | NA | 172 | 829 | 107 | 20.3 | 36 | 66.6 | 118 | 56.8 | 10.0 | 3146 | 36.7 | 22.0 | 47.2 |
| 2 | 60lb-N | NA | NA | 204 | 756 | 100 | 9.1 | 21 | 67.2 | 119 | 57.1 | 8.6 | 3145 | 38.2 | 21.2 | 50.3 |
| 3 | Primo | INTX Microbials | Liquid | 171 | 836 | 114 | 13.8 | 28 | 66.4 | 118 | 56.9 | 9.0 | 3200 | 37.3 | 21.6 | 49.0 |
| 4 | Nature's Aid | INTX Microbials | Granule | 207 | 1099 | 119 | 16.2 | 30 | 66.2 | 117 | 56.9 | 9.4 | 3253 | 37.0 | 21.8 | 47.4 |
| 5 | N-Charge | INTX Microbials | Peat | 174 | 950 | 110 | 12.8 | 26 | 66.4 | 120 | 57.1 | 10.1 | 3145 | 37.9 | 21.4 | 48.6 |
| 6 | Optimize | EMD Crop BioScience | Liquid | 176 | 836 | 94 | 10.8 | 22 | 66.8 | 120 | 56.6 | 9.5 | 3122 | 37.8 | 21.4 | 50.5 |
| 7 | Excalibre | Advanced Biological Marketing | Liquid | 199 | 890 | 109 | 13.2 | 26 | 66.4 | 120 | 57.1 | 8.9 | 3190 | 37.6 | 21.5 | 47.7 |
| 8 | ABM K1 + Excalibre | Advanced Biological Marketing | Liquid | 201 | 992 | 118 | 15.7 | 26 | 66.8 | 119 | 57.1 | 9.0 | 3224 | 37.0 | 21.7 | 48.4 |
| 9 | ABM OC | Advanced Biological Marketing | Liquid | 187 | 906 | 110 | 20.7 | 33 | 66.6 | 118 | 56.9 | 8.6 | 3287 | 37.0 | 21.7 | 48.3 |
| 10 | Vault LVL | Becker Underwood | Liquid | 158 | 894 | 120 | 10.8 | 27 | 66.6 | 119 | 56.8 | 9.7 | 3156 | 37.7 | 21.6 | 49.3 |
| 11 | BUEXP1491 | Becker Underwood | Liquid | 180 | 980 | 125 | 16.4 | 29 | 66.6 | 119 | 56.9 | 9.7 | 3127 | 36.9 | 21.9 | 49.7 |
| 12 | 09BUEXP-SC2 | Becker Underwood | Liquid | 183 | 932 | 107 | 18.9 | 36 | 66.6 | 118 | 56.9 | 8.7 | 3152 | 37.0 | 21.9 | 49.7 |
| 13 | 09BUEXP-SC3 | Becker Underwood | Liquid | 174 | 1034 | 126 | 10.2 | 24 | 66.4 | 118 | 56.7 | 9.5 | 3158 | 37.7 | 21.3 | 49.4 |
| 14 | 09BUEXP-SC4 | Becker Underwood | Liquid | 208 | 836 | 103 | 10.5 | 24 | 66.2 | 119 | 56.9 | 8.4 | 3242 | 37.7 | 21.5 | 50.5 |
| 15 | BioBoost Plus | Brett Young | Liquid | 196 | 827 | 103 | 11.0 | 20 | 66.6 | 118 | 56.9 | 9.5 | 3216 | 37.6 | 21.6 | 49.5 |
| 16 | Soil Implant + | EMD Crop BioScience | Granule | 176 | 733 | 91 | 11.9 | 25 | 66.8 | 120 | 56.7 | 9.3 | 3138 | 37.7 | 21.4 | 47.8 |
| 17 | Soil Implant +/-60lb-N | CREC treatment | Granule | 182 | 871 | 113 | 11.8 | 16 | 66.8 | 118 | 56.9 | 9.2 | 3169 | 37.2 | 21.7 | 51.0 |
| 18 | Soil Implant +/-120lb-N | CREC treatment | Granule | 176 | 670 | 94 | 14.9 | 28 | 66.0 | 118 | 56.6 | 9.6 | 3149 | 37.6 | 21.4 | 51.2 |
| 19 | Optimize+Apron Maxx RTA | CREC treatment | Liquid | 196 | 860 | 110 | 12.4 | 25 | 66.0 | 119 | 57.2 | 8.2 | 3245 | 37.1 | 21.7 | 50.2 |
| 20 | N-Charge+Apron Maxx RTA | CREC treatment | Peat | 213 | 960 | 113 | 12.2 | 24 | 66.4 | 120 | 56.9 | 8.6 | 3205 | 37.6 | 21.6 | 48.4 |
| MEAN | | | | 187 | 884 | 109 | 13.7 | 26 | 66.5 | 119 | 56.9 | 9.2 | 3182 | 37.4 | 21.6 | 49.2 |
| C.V.% | | | | 13.7 | 26.3 | 24.1 | 42.4 | 32.9 | 1.0 | 1.8 | 0.6 | 10.5 | 3.0 | 2.3 | 1.9 | 6.4 |
| LSD (0.05) | | | | 32 | NS | NS | 7.3 | 11 | 0.9 | NS | 0.4 | NS | NS | 1.1 | 0.5 | NS |
| LSD (0.01) | | | | 43 | NS | NS | NS | NS | 1.2 | NS | NS | NS | NS | 1.4 | 0.7 | NS |
| Pr > F | | | | 0.0573 | 0.2488 | 0.8459 | 0.0588 | 0.0494 | 0.0012 | 0.1429 | 0.0292 | 0.1026 | <.0001 | 0.0018 | 0.0002 | 0.8966 |
| #REPS | | | | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |

Planting Date = June 4 ; Harvest Date = November 4 ; Previous Crop = Spring Wheat

Soil test indicated 22 lbs of available N in top 2 feet of soil profile, P = 10 ppm, K = 207 ppm, Organic Matter = 2.5%, Soil pH = 8, Soluble salts = 0.29 mmho/cm

Plant samples for biomass and nodule measurements were collected at early bloom