



# 2022 SOYBEAN

## Iowa Crop Performance Tests



*Iowa's Official Variety Trials*

**IOWA STATE UNIVERSITY**  
**Department of Agronomy**

*A summary of replicated research by Iowa Crop Improvement Association.*



# Iowa Crop Improvement Association

## *Iowa Crop Performance Tests—Soybeans*

is conducted each year to provide information farmers need to select the best varieties for their production conditions. Yield trial information, testing procedures, and more can be found at [croptesting.iastate.edu](http://croptesting.iastate.edu).

### Testing Procedures

Seed companies, Iowa Crop Improvement Association, and Iowa State University are eligible to enter varieties in the Iowa Crop Performance Tests—Soybeans. There are three testing districts and five testing sites within each district (Figure 1). Entries were subdivided into experiments based on relative maturity, providing an early-season and full-season test within each district. In 2022, over 130 varieties from 16 companies were tested in more than 165 district-by-variety combinations.

Each entry was replicated four times in four-row plots at a planting rate of 140,000 seeds per acre at each location. Row spacing was 30 inches, plot length was 20 feet, and planted row length was 17.4 feet. The center two rows of each plot were harvested with a soybean plot combine. A moisture determination was made from each plot and yields were corrected to 13 percent moisture. Yield determinations are based on a 20 foot plot, which includes the planted row plus the alley. This is because area in alleys may contribute to the yield of plants at the ends of planted rows.

### Information Layout

Tables 3-5 contain two-year averages of agronomic information from a maximum of five locations each year. Current year district averages are shown in Tables 6-11, and entries are reported in either the early-season or full-season tests within each district. These tables contain a mean yield and adjusted gross value based on all locations within the district. In addition, there are yield estimates based on the western fields and the eastern fields within a district. In these estimates, the location in the center of the district is used in both subcomponents. Each of these tables also contains the single-location yield for each entry. More detailed information is available at [croptesting.iastate.edu](http://croptesting.iastate.edu).

### Least Squares Means

All trait means in all tables were computed using least squares means. In cases where some values are missing, this provides the best estimates of trait values across replications, locations, and years. Least squares means are not equivalent to simple arithmetic means like those computed in a spreadsheet program using raw data or location means. Least squares means should always be used in multiple-comparison tests like the Iowa Crop Performance Tests.



## Interpretation of Results

Statistical analysis identifies the portion of yield differences due to variation in soil types, soil fertility, moisture availability, insect infestation, and diseases; plus any variation due to planting and harvesting techniques. The least significant difference (LSD) values for yield represent, in bushels per acre, the amount of yield variation that could be due to variations in the factors just mentioned. In comparing varieties, yield differences greater than the LSD value can be attributed to differences in the yield potential of these varieties; yield differences less than the LSD value are not statistically different and could have been due to other factors.

Maturity ratings for varieties are estimates and may vary across seasons. Yield comparisons should be made among varieties of similar maturity.

Growing conditions vary at each location. Stressful conditions, such as drought, extended periods of high temperature, or excess rainfall may affect some locations more than others. It is important to select varieties having stable performance over a range of environmental conditions because it is not certain how next year's growing season will develop. High yields for two or more consecutive years indicate stable performance. If two-year means are not available, regional averages consisting of several locations should be used to make selection decisions. Performance data from a single location have a very low predictive probability and should not be relied upon for variety selection decisions.



Supplemental yield and agronomic information about specific varieties may be obtained from seed dealers, crop consultants, and from neighbors who have grown these varieties.

## Use of Data in Advertisements

Specific advertising statements by a company about the performance of its entries must accurately reflect the published data.

Iowa Crop Performance Tests staff pictured below  
(left to right): Ryan Budnik, Aaron Sassman, & Shawn Bryant



## IOWA STATE UNIVERSITY

### Department of Agronomy

©2022 by Iowa Crop Improvement Association.  
Used with permission.

The presentation of data for the varieties tested does not imply endorsement by the authors or the agencies conducting the test.

Iowa Crop Performance Tests offers unbiased, third-party information to Iowa growers on the adaptation and performance of corn hybrids and soybean varieties. The latest results are available at [croptesting.iastate.edu](https://croptesting.iastate.edu).

Iowa State University does not discriminate on the basis of race, color, age, ethnicity, religion, national origin, pregnancy, sexual orientation, gender identity, genetic information, sex, marital status, disability, or status as a U.S. Veteran. Inquiries regarding non-discrimination policies may be directed to Office of Equal Opportunity, 3410 Beardshear Hall, 515 Morrill Road, Ames, Iowa 50011, Tel. (515) 294-7612, Hotline (515) 294-1222, email [eooffice@iastate.edu](mailto:eooffice@iastate.edu).

CROP 3149 Revised November 2022

## Acknowledgments

This report would not be possible without the cooperative efforts of many organizations and people. Thanks to the following people for helping make our testing program a success: Aaron Sassman, Shawn Bryant, and Graydon Marzen for putting in the time to get the plots planted, keeping them maintained, and ultimately harvested; Bill Backhaus and Patrick Miner of Bayer Crop Science, and Chris Adams of Nutech Seed, LLC for providing us with fill plot and border row seed that is critical to our operation; the farmer cooperators, for without their help, our lives would be more difficult—they are listed in Table 1; Jode Edwards, for ongoing technical support and continued collaboration; students Emma Caspers, Brandon Burke, and William Bussey for their many hours of hard work—their efforts contributed greatly to the success of our mission; Dan McGuire and Nuwan De Silva for web design and technical support; Carol Cornelious and Doan Schmitz for helping fill the gaps whenever and wherever extra hands are needed; and our leader Jim Rouse for his expertise and ongoing support. A special thanks to all the companies who enter varieties in our tests—they are listed at the end of this report in Table 12. It is their participation and support that continues to make these tests an indispensable resource for Iowa farmers.

## For More Information

- For more information about the Iowa Crop Performance Tests, see [croptesting.iastate.edu](https://croptesting.iastate.edu).
- For information about Iowa Crop Improvement Association, visit [iowacrop.org](https://iowacrop.org).
- For questions or comments contact:

**Ryan Budnik**  
Project Manager  
Iowa Crop Improvement Association  
59400 190th St.  
Nevada, IA 50201  
[croptesting@iastate.edu](mailto:croptesting@iastate.edu)

# Contents

## General Information

|                                                                           |   |
|---------------------------------------------------------------------------|---|
| Figure 1. Test locations for the 2022 Iowa Crop Performance Tests—Soybean | 5 |
| Table 1. General information for the 2022 soybean test                    | 6 |
| Table 2. Seed treatment and other data descriptions                       | 6 |

## 2021-2022 Two-Year Means

|                           |   |
|---------------------------|---|
| Table 3. North District   | 7 |
| Table 4. Central District | 8 |
| Table 5. South District   | 9 |

## 2022 District and Single-Location Means

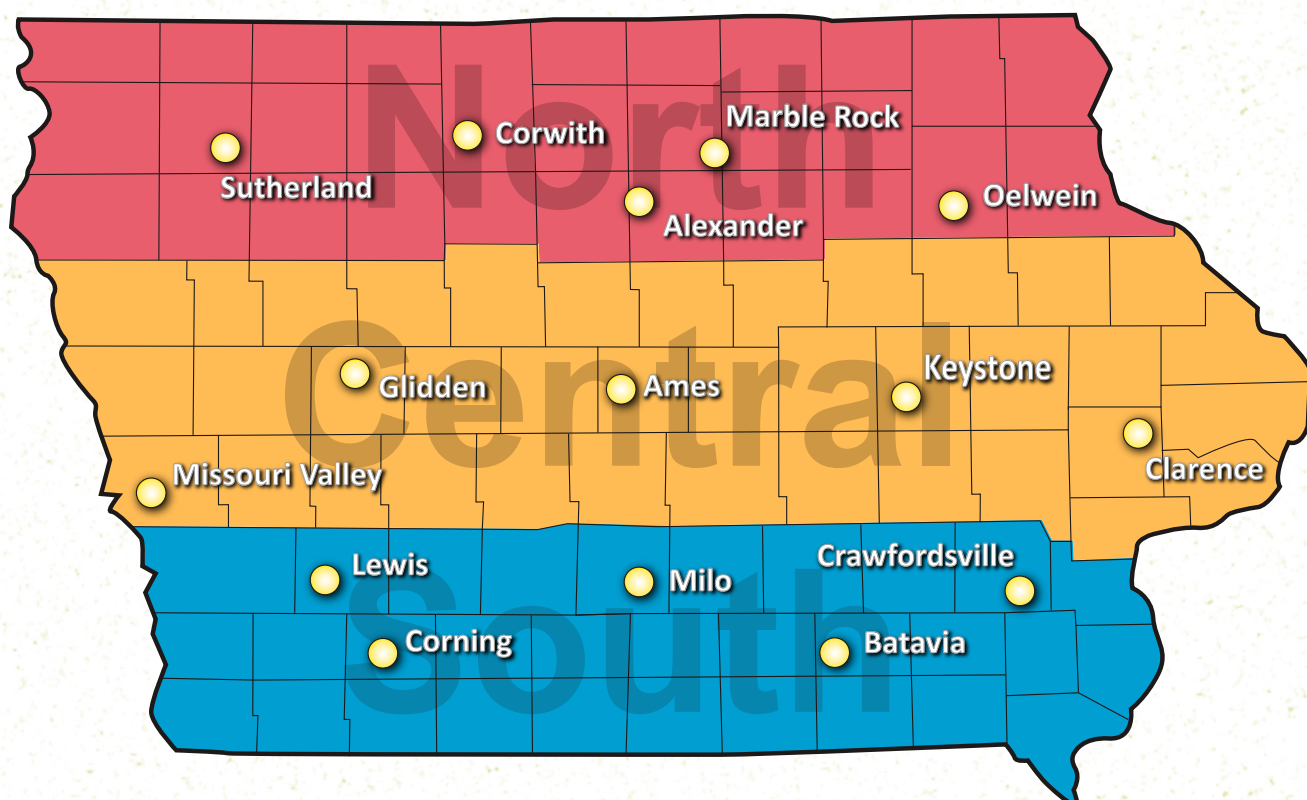
|                                              |    |
|----------------------------------------------|----|
| Table 6. North District, Early-season test   | 10 |
| Table 7. North District, Full-season test    | 11 |
| Table 8. Central District, Early-season test | 12 |
| Table 9. Central District, Full-season test  | 13 |
| Table 10. South District, Early-season test  | 14 |
| Table 11. South District, Full-season test   | 15 |

## Participants

|                               |    |
|-------------------------------|----|
| Table 12. Entrant Information | 16 |
|-------------------------------|----|

Figure 1.

## Test locations for the 2022 Iowa Crop Performance Tests—Soybean



**Table 1. General information for the 2022 soybean test.**

| Location and Cooperator           | Soil Type                                            | Planting Date | Harvest Date | Avg Yield Bu/Acre |
|-----------------------------------|------------------------------------------------------|---------------|--------------|-------------------|
| <b>North</b>                      |                                                      |               |              |                   |
| Sutherland, Terry Tuttle          | Primghar/Galva/Marcus silty clay loam                | 19-May        | 16-Oct       | 56.6              |
| Corwith, Norm & Jonathan Chambers | Canisteo/Bode clay loam & Kossuth silty clay loam    | 18-May        | 4-Oct        | 70.3              |
| Alexander, Phil Long              | Canisteo/Nicollet clay loam & Okoboji complex        | 18-May        | Discard      | --                |
| Marble Rock, Dave Muth            | Ostrander/Bolan loam                                 | 12-May        | 11-Oct       | 86.9              |
| Oelwein, Heath Geiselman          | Readlyn silt loam & Kenyon loam                      | 24-May        | 10-Oct       | 75.3              |
| <b>Central</b>                    |                                                      |               |              |                   |
| Missouri Valley, Dean McIntosh    | Kennebec silt loam                                   | 23-May        | 6-Oct        | 69.7              |
| Glidden, David & Andy Theilen     | Nicollet/Clarion loam, & Webster clay loam           | 17-May        | 7-Oct        | 64.4              |
| Ames, Mike Fiscus                 | Nicollet loam & Canisteo clay loam                   | 21-May        | 15-Oct       | 68.7              |
| Keystone, Dennis Pohlman          | Muscatine/Tama silty clay loam                       | 18-May        | 10-Oct       | 74.0              |
| Clarence, Dave Elijah             | Muscatine/Tama/Garwin silty clay loam                | 9-May         | 14-Oct       | 78.5              |
| <b>South</b>                      |                                                      |               |              |                   |
| Lewis, Matt Groves                | Marshall/Exira silty clay loam                       | 14-May        | 14-Oct       | 46.5              |
| Corning, Chris Gaesser            | Sharpsburg/Nira silty clay loam & Clearfield complex | 14-May        | 14-Oct       | 61.7              |
| Milo, Craig & Adam Hill           | Macksburg silty clay loam                            | 14-May        | 12-Oct       | 60.7              |
| Batavia, Pat Hammes               | Edina/Haig/Grundy silt loam                          | 10-May        | 21-Oct       | 46.9              |
| Crawfordsville, Cody Schneider    | Mahaska/Taintor/Nira silty clay loam                 | 12-May        | 17-Oct       | 75.9              |

**Table 2. Seed treatment and other data descriptions.**

|                                                                                                                                                                                                                                                                                                |                                             |                                        |                                   |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------|----------------------------------------|-----------------------------------|
| <b>Seed Treatment</b>                                                                                                                                                                                                                                                                          |                                             | <b>Herb Tech: Herbicide Technology</b> |                                   |
| <b>ACL+ILVO</b>                                                                                                                                                                                                                                                                                | Acceleron Standard + ILeVO                  | <b>Conv</b>                            | Conventional, no herbicide traits |
| <b>CM</b>                                                                                                                                                                                                                                                                                      | CruiserMaxx                                 | <b>E3</b>                              | Enlist E3                         |
| <b>CMV</b>                                                                                                                                                                                                                                                                                     | CruiserMaxx Vibrance                        | <b>E3S</b>                             | Enlist E3 + STS                   |
| <b>CMV+Salt</b>                                                                                                                                                                                                                                                                                | CruiserMaxx Vibrance + Saltro               | <b>RR2XF</b>                           | Roundup Ready 2 XtendFlex         |
| <b>E-VIP+Salt</b>                                                                                                                                                                                                                                                                              | Elevate VIP + Saltro                        |                                        |                                   |
| <b>L-CT</b>                                                                                                                                                                                                                                                                                    | L-Coat Total                                |                                        |                                   |
| <b>LMGN</b>                                                                                                                                                                                                                                                                                    | Lumisena + Evergol Energy + L2030G + Gaucho |                                        |                                   |
| <b>None</b>                                                                                                                                                                                                                                                                                    | No Seed Treatment                           |                                        |                                   |
| <b>PGP</b>                                                                                                                                                                                                                                                                                     | Profit Guard Plus                           |                                        |                                   |
| <b>PV+ILVO</b>                                                                                                                                                                                                                                                                                 | Poncho-VOTiVO + ILeVO                       |                                        |                                   |
| <b>Yield:</b> Bushels per acre, adjusted to 13% moisture basis<br><b>MG:</b> Maturity group indicated by variety name<br><b>AGV:</b> Adjusted Gross Value, based on a price per bushel of \$13.25 and does not include shrinkage factors                                                       |                                             |                                        |                                   |
| In 2022, we evaluated over 130 varieties from 16 companies, in more than 167 district-by-variety combinations. Entries were distributed in three districts and two experiments per district. Each experiment was grown at five locations, with four replicates of each entry at each location. |                                             |                                        |                                   |

**Table 3. North district 2-year means, 2021-2022.****North early-season varieties, MG  $\leq$  2.2**

| Company                | Variety  | MG  | Herb Tech | Yield Bu/A  | NW Yield Bu/A | NE Yield Bu/A | AGV \$ |
|------------------------|----------|-----|-----------|-------------|---------------|---------------|--------|
| Xitavo                 | XO 1822E | 1.8 | E3        | 71.3        | 67.5          | 72.8          | 882    |
| P3 Genetics            | 2218E    | 1.8 | E3        | 71.1        | 67.8          | 73.0          | 879    |
| Pioneer                | P21A28X  | 2.1 | RR2X      | 70.7        | 67.3          | 72.9          | 874    |
| Xitavo                 | XO 1632E | 1.6 | E3        | 70.2        | 65.3          | 72.9          | 869    |
| Dyna-Gro               | S21EN81  | 2.1 | E3        | 69.4        | 66.9          | 69.9          | 859    |
| Xitavo                 | XO 2181E | 2.1 | E3        | 68.6        | 66.1          | 69.1          | 850    |
| Renk                   | G2150E   | 2.1 | E3        | 68.3        | 64.7          | 69.5          | 845    |
| Xitavo                 | XO 2282E | 2.2 | E3        | 66.9        | 62.9          | 68.5          | 828    |
| Xitavo                 | XO 1971E | 1.9 | E3        | 66.7        | 61.8          | 69.1          | 825    |
| Viking                 | 2155N    | 2.1 | Conv      | 65.8        | 63.0          | 65.9          | 814    |
| Xitavo                 | XO 1761E | 1.7 | E3        | 65.4        | 61.0          | 66.9          | 809    |
| Viking                 | O.2244AT | 2.2 | Conv      | 62.5        | 58.4          | 63.6          | 774    |
| <b>Experiment Mean</b> |          |     |           | <b>68.4</b> | <b>64.7</b>   | <b>70.1</b>   |        |
| <b>LSD(0.25)</b>       |          |     |           | <b>2.2</b>  | <b>2.9</b>    | <b>3.9</b>    |        |

**North full-season varieties, MG  $>$  2.2**

| Company                | Variety  | MG  | Herb Tech | Yield Bu/A  | NW Yield Bu/A | NE Yield Bu/A | AGV \$ |
|------------------------|----------|-----|-----------|-------------|---------------|---------------|--------|
| Pioneer                | P27A17X  | 2.7 | RR2X      | 74.1        | 69.6          | 77.1          | 917    |
| Pioneer                | P25A04X  | 2.5 | RR2X      | 71.5        | 66.7          | 74.5          | 885    |
| Renk                   | G2550E   | 2.5 | E3        | 70.8        | 65.9          | 74.0          | 876    |
| Pioneer                | P23A15X  | 2.3 | RR2X      | 70.3        | 65.6          | 73.0          | 870    |
| Xitavo                 | XO 2501E | 2.5 | E3        | 69.6        | 65.6          | 71.2          | 861    |
| P3 Genetics            | 2223E    | 2.3 | E3        | 69.5        | 66.5          | 70.4          | 860    |
| Xitavo                 | XO 2472E | 2.4 | E3        | 69.4        | 64.5          | 72.2          | 859    |
| Cornelius              | CB23XF63 | 2.3 | RR2XF     | 69.2        | 65.1          | 71.5          | 857    |
| Dyna-Gro               | S23ES32  | 2.3 | E3        | 68.8        | 65.3          | 70.0          | 851    |
| Dyna-Gro               | S25EN02  | 2.5 | E3        | 68.5        | 65.5          | 69.2          | 847    |
| Viking                 | 2340KN   | 2.3 | Conv      | 68.3        | 64.7          | 69.8          | 845    |
| Viking                 | 2418N    | 2.4 | Conv      | 67.7        | 64.7          | 68.6          | 838    |
| Dyna-Gro               | S24XF12  | 2.4 | RR2XF     | 67.3        | 64.0          | 68.4          | 833    |
| <b>Experiment Mean</b> |          |     |           | <b>68.9</b> | <b>65.6</b>   | <b>70.2</b>   |        |
| <b>LSD(0.25)</b>       |          |     |           | <b>2.2</b>  | <b>2.9</b>    | <b>3.9</b>    |        |



**Table 4. Central district 2-year means, 2021-2022.**
**Central early-season varieties, MG ≤ 2.7**

| Company                | Variety  | MG  | Herb Tech | Yield Bu/A  | CW Yield Bu/A | CE Yield Bu/A | AGV \$ |
|------------------------|----------|-----|-----------|-------------|---------------|---------------|--------|
| Pioneer                | P27A17X  | 2.7 | RR2X      | 75.8        | 72.2          | 77.8          | 938    |
| Renk                   | G2550E   | 2.5 | E3        | 73.6        | 70.4          | 72.7          | 911    |
| Pioneer                | P25A04X  | 2.5 | RR2X      | 73.3        | 71.7          | 73.7          | 908    |
| Xitavo                 | XO 2501E | 2.5 | E3        | 73.2        | 71.0          | 73.2          | 906    |
| Viking                 | O.2702   | 2.7 | Conv      | 73.0        | 71.4          | 71.6          | 903    |
| Pioneer                | P23A15X  | 2.3 | RR2X      | 72.6        | 71.2          | 73.1          | 898    |
| Viking                 | 2418N    | 2.4 | Conv      | 71.5        | 68.1          | 71.1          | 885    |
| Dyna-Gro               | S25EN02  | 2.5 | E3        | 70.4        | 69.4          | 69.6          | 871    |
| Cornelius              | CB27XF34 | 2.7 | RR2XF     | 68.1        | 66.6          | 68.1          | 843    |
| <b>Experiment Mean</b> |          |     |           | <b>72.3</b> | <b>69.9</b>   | <b>72.2</b>   |        |
| <b>LSD(0.25)</b>       |          |     |           | <b>2.1</b>  | <b>2.8</b>    | <b>3.1</b>    |        |

**Central full-season varieties, MG > 2.7**

| Company                | Variety  | MG  | Herb Tech | Yield Bu/A  | CW Yield Bu/A | CE Yield Bu/A | AGV \$ |
|------------------------|----------|-----|-----------|-------------|---------------|---------------|--------|
| Pioneer                | P28A42X  | 2.8 | RR2X      | 77.9        | 74.9          | 78.5          | 964    |
| Pioneer                | P31A22X  | 3.1 | RR2X      | 75.0        | 73.9          | 74.4          | 928    |
| Xitavo                 | XO 2832E | 2.8 | E3        | 74.8        | 72.6          | 74.9          | 925    |
| Renk                   | G2960E   | 2.9 | E3        | 74.6        | 73.2          | 73.5          | 923    |
| Dyna-Gro               | S29EN62  | 2.9 | E3        | 74.4        | 72.8          | 73.2          | 920    |
| Cornelius              | CB31XF42 | 3.1 | RR2XF     | 74.4        | 71.6          | 74.1          | 920    |
| Xitavo                 | XO 3131E | 3.1 | E3        | 74.0        | 70.4          | 74.6          | 916    |
| P3 Genetics            | 2229E    | 2.9 | E3        | 73.9        | 72.5          | 72.6          | 915    |
| Dyna-Gro               | S28EN22  | 2.8 | E3        | 73.8        | 71.7          | 73.5          | 914    |
| P3 Genetics            | 1928E    | 2.8 | E3        | 73.8        | 70.6          | 75.1          | 913    |
| Xitavo                 | XO 2921E | 2.9 | E3        | 72.8        | 72.7          | 72.4          | 900    |
| <b>Experiment Mean</b> |          |     |           | <b>74.1</b> | <b>71.5</b>   | <b>74.1</b>   |        |
| <b>LSD(0.25)</b>       |          |     |           | <b>2.1</b>  | <b>2.8</b>    | <b>3.1</b>    |        |



**Table 5. South district 2-year means, 2021-2022.****South early-season varieties, MG  $\leq$  3.2**

| Company                | Variety  | MG  | Herb Tech | Yield Bu/A  | SW Yield Bu/A | SE Yield Bu/A | AGV \$ |
|------------------------|----------|-----|-----------|-------------|---------------|---------------|--------|
| Xitavo                 | XO 3131E | 3.1 | E3        | 64.1        | 64.1          | 63.7          | 793    |
| Dyna-Gro               | S31XF82  | 3.1 | RR2XF     | 62.4        | 62.5          | 62.5          | 772    |
| Pioneer                | P31A22X  | 3.1 | RR2X      | 62.1        | 63.3          | 60.9          | 769    |
| Pioneer                | P28A42X  | 2.8 | RR2X      | 61.4        | 63.1          | 59.0          | 760    |
| Viking                 | O.3118N  | 3.1 | Conv      | 61.2        | 60.3          | 61.6          | 757    |
| Dyna-Gro               | S29EN62  | 2.9 | E3        | 60.8        | 60.6          | 60.5          | 752    |
| Dyna-Gro               | S28EN22  | 2.8 | E3        | 60.7        | 61.0          | 60.6          | 751    |
| Xitavo                 | XO 2921E | 2.9 | E3        | 60.7        | 62.0          | 58.9          | 751    |
| Xitavo                 | XO 2832E | 2.8 | E3        | 59.3        | 59.7          | 58.2          | 734    |
| Renk                   | G2960E   | 2.9 | E3        | 58.9        | 61.2          | 57.2          | 729    |
| <b>Experiment Mean</b> |          |     |           | <b>61.4</b> | <b>62.0</b>   | <b>61.0</b>   |        |
| <b>LSD(0.25)</b>       |          |     |           | <b>2.3</b>  | <b>2.8</b>    | <b>3.2</b>    |        |

**South full-season varieties, MG  $>$  3.2**

| Company                | Variety  | MG  | Herb Tech | Yield Bu/A  | SW Yield Bu/A | SE Yield Bu/A | AGV \$ |
|------------------------|----------|-----|-----------|-------------|---------------|---------------|--------|
| Cornelius              | CB37XF70 | 3.7 | RR2XF     | 67.5        | 68.6          | 67.1          | 835    |
| Dyna-Gro               | S33EN42  | 3.3 | E3        | 67.2        | 67.7          | 67.6          | 831    |
| Xitavo                 | XO 3651E | 3.6 | E3        | 65.6        | 66.1          | 65.0          | 812    |
| Dyna-Gro               | S33XF62  | 3.3 | RR2XF     | 64.5        | 64.5          | 64.6          | 798    |
| P3 Genetics            | 2234E    | 3.4 | E3        | 64.4        | 65.5          | 62.7          | 797    |
| Xitavo                 | XO 3341E | 3.3 | E3        | 63.4        | 64.7          | 62.0          | 784    |
| Pioneer                | P33A53X  | 3.3 | RR2X      | 63.1        | 63.8          | 61.7          | 781    |
| P3 Genetics            | 2136E    | 3.6 | E3        | 63.1        | 64.8          | 62.5          | 781    |
| P3 Genetics            | 2039E    | 3.9 | E3        | 63.1        | 63.1          | 63.9          | 780    |
| Cornelius              | CB39XF19 | 3.9 | RR2XF     | 61.3        | 61.4          | 61.8          | 758    |
| Pioneer                | P37A27X  | 3.7 | RR2X      | 51.1        | 49.2          | 51.8          | 633    |
| <b>Experiment Mean</b> |          |     |           | <b>64.2</b> | <b>65.2</b>   | <b>63.9</b>   |        |
| <b>LSD(0.25)</b>       |          |     |           | <b>2.3</b>  | <b>2.8</b>    | <b>3.2</b>    |        |



**Table 6. North district, 2022 district and single-location means. Early-season test, MG  $\leq$  2.2.**

| Company                           | Variety   | MG  | Herb Tech | District Means |          |          | Single Location Yield |             |                          |             |             |
|-----------------------------------|-----------|-----|-----------|----------------|----------|----------|-----------------------|-------------|--------------------------|-------------|-------------|
|                                   |           |     |           | Yield Bu/A     | NW Yield | NE Yield | Sutherland            | Corwith     | Alexander                | Marble Rock | Oelwein     |
| P3 Genetics                       | 2218E     | 1.8 | E3        | 76.4           | 67.4     | 86.1     | 60.4                  | 72.2        | This test was discarded. | 91.3        | 81.6        |
| Xitavo                            | XO 1822E  | 1.8 | E3        | 76.4           | 66.1     | 84.9     | 59.2                  | 73.2        |                          | 89.9        | 79.8        |
| Titan Pro                         | TP 20E22  | 2   | E3        | 75.8           | 64.7     | 86.1     | 59.6                  | 69.4        |                          | 93.9        | 78.2        |
| LOYAL                             | L2250E    | 2.2 | E3        | 75.1           | 68.0     | 83.1     | 60.6                  | 72.4        |                          | 91.8        | 73.1        |
| P3 Genetics                       | 2322E     | 2.2 | E3        | 75.1           | 65.3     | 82.8     | 59.6                  | 74.6        |                          | 87.4        | 77.6        |
| Renk                              | G2270E    | 2.2 | E3        | 75.1           | 66.5     | 83.7     | 59.8                  | 71.1        |                          | 89.8        | 77.3        |
| Dyna-Gro                          | S21EN81   | 2.1 | E3        | 74.9           | 66.6     | 80.8     | 59.2                  | 74.4        |                          | 90.8        | 71.8        |
| Xitavo                            | XO 1632E  | 1.6 | E3        | 74.8           | 62.6     | 85.3     | 54.0                  | 69.9        |                          | 88.7        | 82.1        |
| Cornelius                         | CB18XF88  | 1.8 | RR2XF     | 74.7           | 65.0     | 82.5     | 56.3                  | 74.3        |                          | 87.5        | 77.0        |
| Golden Harvest                    | GH1973E3S | 1.9 | E3S       | 73.9           | 62.6     | 83.0     | 57.7                  | 68.7        |                          | 88.4        | 76.6        |
| Pioneer                           | P21A28X   | 2.1 | RR2X      | 73.7           | 65.8     | 80.7     | 60.0                  | 70.8        |                          | 84.4        | 77.4        |
| Golden Harvest                    | GH2292E3  | 2.2 | E3        | 73.7           | 62.4     | 83.2     | 54.9                  | 68.9        |                          | 85.9        | 80.6        |
| NuTech/G2 Genetics                | 21N07E    | 2.1 | E3        | 73.6           | 62.0     | 83.8     | 58.1                  | 67.2        |                          | 88.9        | 78.4        |
| LOYAL                             | L2150E    | 2.1 | E3        | 73.6           | 61.5     | 83.3     | 51.1                  | 70.7        |                          | 90.3        | 76.9        |
| P3 Genetics                       | 2320E     | 2   | E3        | 73.6           | 63.1     | 81.4     | 59.0                  | 68.2        |                          | 92.7        | 72.2        |
| Viking                            | 2022N     | 2   | Conv      | 73.6           | 64.0     | 82.2     | 60.5                  | 66.1        |                          | 89.6        | 75.0        |
| Xitavo                            | XO 2181E  | 2.1 | E3        | 73.5           | 63.1     | 82.1     | 56.7                  | 70.4        |                          | 90.7        | 73.3        |
| LOYAL                             | L1950E    | 1.9 | E3        | 73.4           | 61.6     | 83.1     | 53.7                  | 69.2        |                          | 90.7        | 75.6        |
| Asgrow                            | AG19XF3   | 1.9 | RR2XF     | 73.2           | 65.2     | 79.8     | 57.1                  | 71.2        |                          | 82.7        | 77.0        |
| Virtue                            | V2122     | 2.2 | Conv      | 73.2           | 64.1     | 79.9     | 57.1                  | 74.3        |                          | 88.8        | 71.0        |
| Iowa State                        | IAS19C3   | 1.9 | Conv      | 73.0           | 62.5     | 80.5     | 57.9                  | 68.4        |                          | 86.1        | 75.0        |
| Renk                              | G2150E    | 2.1 | E3        | 72.9           | 62.7     | 80.7     | 56.7                  | 68.1        |                          | 90.1        | 73.4        |
| Titan Pro                         | TP 18E22  | 1.8 | E3        | 72.8           | 64.5     | 79.3     | 60.0                  | 69.0        |                          | 85.5        | 72.8        |
| Dyna-Gro                          | S20EN92   | 2   | E3        | 72.7           | 64.1     | 81.2     | 56.0                  | 70.6        |                          | 84.0        | 77.4        |
| Cornelius                         | CB21XF34  | 2.1 | RR2XF     | 72.2           | 62.5     | 78.5     | 56.2                  | 70.5        |                          | 82.5        | 74.7        |
| Xitavo                            | XO 1761E  | 1.7 | E3        | 72.2           | 63.5     | 79.1     | 54.5                  | 69.0        |                          | 82.6        | 76.9        |
| Golden Harvest                    | GH2083E3S | 2   | E3S       | 72.2           | 61.6     | 80.8     | 54.0                  | 67.7        |                          | 86.4        | 75.8        |
| NuTech/G2 Genetics                | 19N03E    | 1.9 | E3        | 72.0           | 61.0     | 79.0     | 57.9                  | 68.1        |                          | 83.3        | 74.6        |
| Viking                            | 2155N     | 2.1 | Conv      | 72.0           | 61.0     | 81.4     | 54.0                  | 68.5        |                          | 88.8        | 72.9        |
| Xitavo                            | XO 1971E  | 1.9 | E3        | 71.8           | 60.6     | 79.1     | 55.5                  | 66.6        |                          | 86.8        | 73.2        |
| Xitavo                            | XO 2282E  | 2.2 | E3        | 71.7           | 63.7     | 77.9     | 55.4                  | 70.4        |                          | 83.2        | 72.4        |
| Dyna-Gro                          | S19XF62   | 1.9 | RR2XF     | 71.6           | 59.5     | 79.1     | 55.1                  | 67.8        |                          | 84.2        | 74.0        |
| NuTech/G2 Genetics                | 16N04E    | 1.6 | E3        | 70.7           | 60.3     | 78.3     | 56.3                  | 64.0        |                          | 82.3        | 74.9        |
| Illini                            | 2043Na    | 2   | Conv      | 68.8           | 59.3     | 74.9     | 52.7                  | 64.6        |                          | 80.5        | 70.1        |
| Viking                            | O.2244AT  | 2.2 | Conv      | 68.1           | 57.3     | 76.5     | 53.5                  | 61.7        |                          | 79.2        | 72.4        |
| <b>Experiment Mean</b>            |           |     |           | <b>73.2</b>    |          |          | <b>56.9</b>           | <b>69.5</b> |                          | <b>87.1</b> | <b>75.5</b> |
| <b>Minimum Mean</b>               |           |     |           | <b>68.1</b>    |          |          | <b>51.1</b>           | <b>61.7</b> |                          | <b>79.2</b> | <b>70.1</b> |
| <b>Maximum Mean</b>               |           |     |           | <b>76.4</b>    |          |          | <b>60.6</b>           | <b>74.6</b> |                          | <b>93.9</b> | <b>82.1</b> |
| <b>LSD(0.25)</b>                  |           |     |           | <b>1.7</b>     |          |          | <b>1.9</b>            | <b>2.5</b>  |                          | <b>2.2</b>  | <b>3.0</b>  |
| <b>Coefficient of Variability</b> |           |     |           | <b>3.5</b>     |          |          | <b>3.4</b>            | <b>3.8</b>  |                          | <b>2.9</b>  | <b>4.6</b>  |



**Table 7. North district, 2022 district and single-location means. Full-season test, MG > 2.2.**

| Company                           | Variety   | MG  | Herb Tech | District Means |          |          | Single Location Yield |             |                          |             |             |
|-----------------------------------|-----------|-----|-----------|----------------|----------|----------|-----------------------|-------------|--------------------------|-------------|-------------|
|                                   |           |     |           | Yield Bu/A     | NW Yield | NE Yield | Sutherland            | Corwith     | Alexander                | Marble Rock | Oelwein     |
| LOYAL                             | L2550E    | 2.5 | E3        | 77.2           | 66.5     | 87.2     | 60.1                  | 75.0        | This test was discarded. | 96.3        | 78.5        |
| Pioneer                           | P27A17X   | 2.7 | RR2X      | 76.7           | 67.6     | 83.5     | 60.0                  | 74.8        |                          | 88.4        | 79.4        |
| Asgrow                            | AG22XF3   | 2.2 | RR2XF     | 75.1           | 65.9     | 82.2     | 57.3                  | 75.3        |                          | 87.5        | 77.3        |
| Cornelius                         | CB24XF27  | 2.4 | RR2XF     | 75.1           | 66.1     | 82.2     | 59.5                  | 73.2        |                          | 85.3        | 79.2        |
| Renk                              | G2570ES   | 2.5 | E3        | 75.0           | 60.7     | 85.4     | 57.6                  | 68.8        |                          | 94.1        | 76.3        |
| Xitavo                            | XO 2501E  | 2.5 | E3        | 74.9           | 63.8     | 85.4     | 57.4                  | 69.7        |                          | 86.5        | 83.2        |
| P3 Genetics                       | 2223E     | 2.3 | E3        | 74.7           | 66.2     | 82.9     | 57.4                  | 72.3        |                          | 85.6        | 80.3        |
| Renk                              | G2550E    | 2.5 | E3        | 74.5           | 64.4     | 82.1     | 56.8                  | 71.9        |                          | 87.1        | 77.8        |
| P3 Genetics                       | 2326E     | 2.6 | E3        | 74.5           | 64.1     | 82.5     | 57.1                  | 72.4        |                          | 89.3        | 76.0        |
| NuTech/G2 Genetics                | 27N03E    | 2.7 | E3        | 74.3           | 64.7     | 82.4     | 57.2                  | 72.9        |                          | 91.1        | 73.7        |
| Cornelius                         | CB23XF63  | 2.3 | RR2XF     | 74.0           | 64.6     | 82.6     | 54.3                  | 74.5        |                          | 85.7        | 78.3        |
| Xitavo                            | XO 2472E  | 2.4 | E3        | 73.9           | 62.1     | 84.0     | 56.3                  | 69.4        |                          | 88.5        | 78.8        |
| Xitavo                            | XO 2323E  | 2.3 | E3        | 73.8           | 62.9     | 82.0     | 57.4                  | 70.9        |                          | 89.0        | 74.4        |
| Pioneer                           | P25A04X   | 2.5 | RR2X      | 73.7           | 66.1     | 79.6     | 54.6                  | 75.8        |                          | 84.0        | 75.5        |
| Legacy Seeds                      | LC260-21C | 2.6 | Conv      | 73.7           | 65.5     | 82.3     | 55.5                  | 72.9        |                          | 86.6        | 75.2        |
| Viking                            | 2340KN    | 2.3 | Conv      | 73.6           | 62.7     | 81.0     | 54.5                  | 72.6        |                          | 91.4        | 72.9        |
| Golden Harvest                    | GH2653XF  | 2.6 | RR2XF     | 73.5           | 67.0     | 78.6     | 58.5                  | 73.8        |                          | 85.7        | 72.4        |
| NuTech/G2 Genetics                | 25N04E    | 2.5 | E3        | 73.4           | 61.9     | 82.7     | 54.0                  | 69.9        |                          | 88.8        | 77.3        |
| Dyna-Gro                          | S23ES32   | 2.3 | E3        | 73.3           | 64.0     | 81.7     | 54.6                  | 71.2        |                          | 86.6        | 76.4        |
| NuTech/G2 Genetics                | 26N06E    | 2.6 | E3        | 73.3           | 61.0     | 82.9     | 54.7                  | 68.7        |                          | 87.2        | 78.1        |
| Golden Harvest                    | GH2313XF  | 2.3 | RR2XF     | 72.9           | 65.9     | 77.9     | 58.8                  | 72.8        |                          | 82.0        | 73.5        |
| Pioneer                           | P23A15X   | 2.3 | RR2X      | 72.9           | 62.0     | 80.4     | 53.0                  | 70.5        |                          | 85.9        | 76.9        |
| Dyna-Gro                          | S26EN53   | 2.6 | E3        | 72.0           | 64.2     | 79.2     | 53.3                  | 72.7        |                          | 85.2        | 72.3        |
| Dyna-Gro                          | S24XF12   | 2.4 | RR2XF     | 71.9           | 63.9     | 78.0     | 56.2                  | 72.1        |                          | 82.5        | 72.4        |
| Xitavo                            | XO 2613E  | 2.6 | E3        | 71.9           | 63.1     | 80.1     | 54.2                  | 69.9        |                          | 87.0        | 73.3        |
| Dyna-Gro                          | S25EN02   | 2.5 | E3        | 71.8           | 59.9     | 80.4     | 53.4                  | 69.2        |                          | 84.6        | 75.2        |
| Iowa State                        | IAS25C1   | 2.5 | Conv      | 71.7           | 62.4     | 77.9     | 58.8                  | 66.4        |                          | 83.8        | 72.1        |
| Viking                            | 2418N     | 2.4 | Conv      | 71.5           | 60.5     | 80.6     | 52.0                  | 69.3        |                          | 87.6        | 73.2        |
| NuTech/G2 Genetics                | 24N04E    | 2.4 | E3        | 71.1           | 63.4     | 76.4     | 57.0                  | 70.2        |                          | 84.1        | 68.6        |
| Viking                            | 0.2702    | 2.7 | Conv      | 70.3           | 62.4     | 75.1     | 55.3                  | 70.5        |                          | 80.3        | 69.8        |
| Illini                            | 2643N     | 2.6 | Conv      | 70.3           | 61.7     | 76.0     | 59.4                  | 64.5        |                          | 82.9        | 68.1        |
| Illini                            | 2398N     | 2.3 | Conv      | 68.4           | 59.0     | 73.6     | 55.3                  | 63.9        |                          | 80.5        | 67.4        |
| <b>Experiment Mean</b>            |           |     |           | <b>73.3</b>    |          |          | <b>56.3</b>           | <b>71.2</b> |                          | <b>86.6</b> | <b>75.1</b> |
| <b>Minimum Mean</b>               |           |     |           | <b>68.4</b>    |          |          | <b>52.0</b>           | <b>63.9</b> |                          | <b>80.3</b> | <b>67.4</b> |
| <b>Maximum Mean</b>               |           |     |           | <b>77.2</b>    |          |          | <b>60.1</b>           | <b>75.8</b> |                          | <b>96.3</b> | <b>83.2</b> |
| <b>LSD(0.25)</b>                  |           |     |           | <b>1.7</b>     |          |          | <b>1.9</b>            | <b>2.5</b>  |                          | <b>2.2</b>  | <b>3.0</b>  |
| <b>Coefficient of Variability</b> |           |     |           | <b>3.5</b>     |          |          | <b>3.4</b>            | <b>3.8</b>  |                          | <b>2.9</b>  | <b>4.6</b>  |



**Table 8. Central district, 2022 district and single-location means. Early-season test, MG ≤ 2.7.**

| Company                           | Variety  | MG  | Herb Tech | District Means |          |          | Single Location Yield |             |             |             |             |
|-----------------------------------|----------|-----|-----------|----------------|----------|----------|-----------------------|-------------|-------------|-------------|-------------|
|                                   |          |     |           | Yield Bu/A     | CW Yield | CE Yield | Missouri Valley       | Glidden     | Ames        | Keystone    | Clarence    |
| Pioneer                           | P27A17X  | 2.7 | RR2X      | 74.7           | 71.2     | 77.0     | 71.2                  | 68.9        | 71.9        | 78.2        | 83.4        |
| P3 Genetics                       | 2326E    | 2.6 | E3        | 74.4           | 70.2     | 78.1     | 71.2                  | 68.2        | 70.6        | 80.7        | 82.2        |
| Titan Pro                         | TP 25E22 | 2.5 | E3        | 74.4           | 71.0     | 78.3     | 69.2                  | 69.9        | 72.8        | 76.6        | 83.7        |
| NuTech/G2 Genetics                | 27N03E   | 2.7 | E3        | 74.3           | 71.8     | 77.1     | 70.6                  | 70.0        | 73.8        | 76.8        | 80.4        |
| NuTech/G2 Genetics                | 25N04E   | 2.5 | E3        | 73.0           | 70.8     | 76.7     | 67.5                  | 66.2        | 75.7        | 73.5        | 81.3        |
| Dyna-Gro                          | S26XF42  | 2.6 | RR2XF     | 72.0           | 69.4     | 74.8     | 70.9                  | 65.1        | 71.2        | 77.5        | 74.7        |
| Pioneer                           | P25A04X  | 2.5 | RR2X      | 71.9           | 67.6     | 75.1     | 69.7                  | 64.4        | 69.1        | 73.4        | 80.7        |
| Pioneer                           | P23A15X  | 2.3 | RR2X      | 71.1           | 68.4     | 73.7     | 67.7                  | 65.4        | 71.9        | 73.6        | 76.5        |
| Golden Harvest                    | GH2653XF | 2.6 | RR2XF     | 70.8           | 64.4     | 74.3     | 70.3                  | 59.4        | 65.2        | 77.6        | 82.1        |
| Renk                              | G2570ES  | 2.5 | E3        | 70.8           | 66.7     | 73.9     | 65.9                  | 63.7        | 69.1        | 73.5        | 80.7        |
| Xitavo                            | XO 2501E | 2.5 | E3        | 70.7           | 68.4     | 72.2     | 69.7                  | 65.3        | 68.3        | 76.8        | 73.8        |
| P3 Genetics                       | 2223E    | 2.3 | E3        | 70.6           | 67.0     | 73.0     | 71.0                  | 63.2        | 66.0        | 73.2        | 78.2        |
| Viking                            | O.2702   | 2.7 | Conv      | 70.4           | 68.9     | 71.7     | 70.7                  | 64.3        | 70.0        | 71.2        | 75.3        |
| Golden Harvest                    | GH2313XF | 2.3 | RR2XF     | 70.2           | 65.9     | 73.5     | 70.0                  | 59.1        | 68.9        | 76.7        | 76.9        |
| Dyna-Gro                          | S26EN53  | 2.6 | E3        | 70.0           | 67.0     | 71.7     | 68.7                  | 63.7        | 66.6        | 71.5        | 79.3        |
| Cornelius                         | CB25XF99 | 2.5 | RR2XF     | 69.8           | 65.5     | 70.1     | 67.7                  | 66.8        | 62.2        | 71.6        | 81.0        |
| Asgrow                            | AG25XF3  | 2.5 | RR2XF     | 69.5           | 63.5     | 71.5     | 66.7                  | 65.2        | 58.7        | 74.5        | 81.0        |
| Xitavo                            | XO 2613E | 2.6 | E3        | 69.3           | 67.8     | 71.1     | 68.8                  | 65.3        | 66.8        | 70.9        | 74.8        |
| Renk                              | G2550E   | 2.5 | E3        | 69.1           | 67.8     | 71.4     | 67.3                  | 65.2        | 67.3        | 75.8        | 71.4        |
| Xitavo                            | XO 2472E | 2.4 | E3        | 69.1           | 65.6     | 71.6     | 68.9                  | 62.0        | 69.3        | 70.3        | 75.7        |
| Xitavo                            | XO 2323E | 2.3 | E3        | 68.8           | 66.2     | 73.1     | 65.3                  | 62.0        | 70.0        | 72.6        | 74.3        |
| Dyna-Gro                          | S25EN02  | 2.5 | E3        | 68.7           | 66.9     | 69.9     | 68.2                  | 65.2        | 67.6        | 70.8        | 71.3        |
| Viking                            | 2418N    | 2.4 | Conv      | 68.2           | 64.3     | 69.5     | 68.5                  | 61.3        | 64.3        | 70.8        | 76.7        |
| NuTech/G2 Genetics                | 24N04E   | 2.4 | E3        | 68.1           | 65.5     | 69.6     | 69.8                  | 61.4        | 65.7        | 70.8        | 72.8        |
| Iowa State                        | IAS25C1  | 2.5 | Conv      | 67.7           | 65.8     | 68.1     | 69.9                  | 62.8        | 65.2        | 67.0        | 74.5        |
| Golden Harvest                    | GH2292E3 | 2.2 | E3        | 66.7           | 64.4     | 67.8     | 65.4                  | 64.7        | 61.9        | 69.3        | 73.4        |
| Cornelius                         | CB27XF34 | 2.7 | RR2XF     | 66.0           | 64.4     | 70.2     | 65.3                  | 59.2        | 69.2        | 66.9        | 69.5        |
| Virtue                            | V2423    | 2.4 | Conv      | 65.3           | 62.9     | 66.2     | 65.9                  | 61.7        | 59.1        | 70.2        | 68.7        |
| <b>Experiment Mean</b>            |          |     |           | <b>71.1</b>    |          |          | <b>68.6</b>           | <b>64.3</b> | <b>67.8</b> | <b>73.3</b> | <b>76.9</b> |
| <b>Minimum Mean</b>               |          |     |           | <b>65.3</b>    |          |          | <b>65.3</b>           | <b>59.1</b> | <b>58.7</b> | <b>66.9</b> | <b>68.7</b> |
| <b>Maximum Mean</b>               |          |     |           | <b>75.9</b>    |          |          | <b>71.2</b>           | <b>70.0</b> | <b>75.7</b> | <b>80.7</b> | <b>83.7</b> |
| <b>LSD(0.25)</b>                  |          |     |           | <b>2.1</b>     |          |          | <b>2.4</b>            | <b>2.9</b>  | <b>3.0</b>  | <b>2.1</b>  | <b>3.5</b>  |
| <b>Coefficient of Variability</b> |          |     |           | <b>4.3</b>     |          |          | <b>3.9</b>            | <b>4.7</b>  | <b>4.7</b>  | <b>2.9</b>  | <b>5.1</b>  |



**Table 9. Central district, 2022 district and single-location means. Full-season test, MG > 2.7.**

| Company                           | Variety  | MG  | Herb Tech | District Means |          |          | Single Location Yield |             |             |             |             |
|-----------------------------------|----------|-----|-----------|----------------|----------|----------|-----------------------|-------------|-------------|-------------|-------------|
|                                   |          |     |           | Yield Bu/A     | CW Yield | CE Yield | Missouri Valley       | Glidden     | Ames        | Keystone    | Clarence    |
| Asgrow                            | AG27XF3  | 2.7 | RR2XF     | 75.9           | 68.9     | 79.9     | 70.0                  | 67.3        | 69.1        | 80.9        | 92.3        |
| Pioneer                           | P28A42X  | 2.8 | RR2X      | 75.1           | 69.9     | 79.4     | 70.8                  | 65.1        | 74.7        | 79.7        | 84.9        |
| Pioneer                           | P31A22X  | 3.1 | RR2X      | 74.7           | 70.0     | 78.1     | 77.3                  | 62.6        | 72.2        | 79.5        | 81.6        |
| NuTech/G2 Genetics                | 31N06E   | 3.1 | E3        | 74.6           | 71.4     | 78.6     | 74.0                  | 64.7        | 72.1        | 77.5        | 84.6        |
| Golden Harvest                    | GH2722XF | 2.7 | RR2XF     | 74.2           | 71.4     | 77.9     | 73.9                  | 65.8        | 74.8        | 76.2        | 82.0        |
| Renk                              | G2960E   | 2.9 | E3        | 73.2           | 70.5     | 74.0     | 71.9                  | 70.8        | 71.8        | 74.7        | 76.5        |
| P3 Genetics                       | 2331E    | 3.1 | E3        | 73.2           | 68.8     | 76.3     | 70.4                  | 67.6        | 66.8        | 75.2        | 85.6        |
| Xitavo                            | XO 2832E | 2.8 | E3        | 73.1           | 69.8     | 76.4     | 69.4                  | 68.0        | 72.6        | 76.3        | 80.1        |
| NuTech/G2 Genetics                | 29N02E   | 2.9 | E3        | 73.0           | 67.7     | 78.3     | 72.2                  | 63.0        | 71.1        | 77.2        | 82.0        |
| P3 Genetics                       | 1928E    | 2.8 | E3        | 72.9           | 68.4     | 76.8     | 69.4                  | 66.6        | 68.1        | 75.5        | 84.2        |
| Golden Harvest                    | GH2922E3 | 2.9 | E3        | 72.2           | 67.4     | 73.3     | 73.9                  | 64.9        | 67.4        | 73.0        | 82.4        |
| Cornelius                         | CB31XF42 | 3.1 | RR2XF     | 72.1           | 67.2     | 75.5     | 69.2                  | 66.0        | 69.6        | 72.3        | 82.9        |
| Dyna-Gro                          | S29EN62  | 2.9 | E3        | 72.0           | 68.9     | 74.8     | 69.1                  | 65.0        | 74.2        | 73.9        | 76.6        |
| Xitavo                            | XO 2963E | 2.9 | E3        | 71.9           | 69.2     | 74.5     | 71.8                  | 63.4        | 70.7        | 73.1        | 80.8        |
| Xitavo                            | XO 2921E | 2.9 | E3        | 71.6           | 69.8     | 74.3     | 71.7                  | 64.6        | 72.0        | 73.3        | 76.3        |
| Xitavo                            | XO 3131E | 3.1 | E3        | 71.3           | 66.0     | 74.5     | 69.7                  | 62.4        | 70.7        | 75.4        | 78.1        |
| P3 Genetics                       | 2229E    | 2.9 | E3        | 71.3           | 68.4     | 74.3     | 72.5                  | 63.7        | 68.8        | 75.9        | 76.5        |
| NuTech/G2 Genetics                | 30N05E   | 3   | E3        | 71.3           | 66.7     | 75.2     | 72.9                  | 59.7        | 68.9        | 74.2        | 80.8        |
| Dyna-Gro                          | S28EN22  | 2.8 | E3        | 71.2           | 68.4     | 74.5     | 71.6                  | 65.7        | 67.6        | 70.4        | 79.8        |
| Viking                            | O.3118N  | 3.1 | Conv      | 69.8           | 64.5     | 72.8     | 71.3                  | 59.3        | 63.5        | 72.9        | 81.4        |
| Iowa State                        | IAS31C1  | 3.1 | Conv      | 69.6           | 66.5     | 72.4     | 70.2                  | 61.4        | 71.6        | 71.5        | 73.5        |
| Illini                            | 2904N    | 2.9 | Conv      | 69.4           | 69.0     | 70.4     | 72.6                  | 64.3        | 67.9        | 71.9        | 70.5        |
| Illini                            | 3267N    | 3.2 | Conv      | 68.8           | 66.5     | 70.8     | 69.6                  | 64.0        | 65.6        | 72.5        | 71.5        |
| Cornelius                         | CB29XF35 | 2.9 | RR2XF     | 68.3           | 61.7     | 73.3     | 57.4                  | 62.9        | 63.4        | 74.9        | 84.0        |
| <b>Experiment Mean</b>            |          |     |           | <b>71.1</b>    |          |          | <b>71.0</b>           | <b>64.5</b> | <b>69.8</b> | <b>74.9</b> | <b>80.4</b> |
| <b>Minimum Mean</b>               |          |     |           | <b>65.3</b>    |          |          | <b>57.4</b>           | <b>59.3</b> | <b>63.4</b> | <b>70.4</b> | <b>70.5</b> |
| <b>Maximum Mean</b>               |          |     |           | <b>75.9</b>    |          |          | <b>77.3</b>           | <b>70.8</b> | <b>74.8</b> | <b>80.9</b> | <b>92.3</b> |
| <b>LSD(0.25)</b>                  |          |     |           | <b>2.1</b>     |          |          | <b>2.4</b>            | <b>2.9</b>  | <b>3.0</b>  | <b>2.1</b>  | <b>3.5</b>  |
| <b>Coefficient of Variability</b> |          |     |           | <b>4.3</b>     |          |          | <b>3.9</b>            | <b>4.7</b>  | <b>4.7</b>  | <b>2.9</b>  | <b>5.1</b>  |



**Table 10. South district, 2022 district and single-location means. Early-season test, MG  $\leq$  3.2.**

| Company                           | Variety  | MG  | Herb Tech | District Means |          |          | Single Location Yield |             |             |             |                |
|-----------------------------------|----------|-----|-----------|----------------|----------|----------|-----------------------|-------------|-------------|-------------|----------------|
|                                   |          |     |           | Yield Bu/A     | SW Yield | SE Yield | Lewis                 | Corning     | Milo        | Batavia     | Crawfordsville |
| Asgrow                            | AG31XF3  | 3.1 | RR2XF     | 62.4           | 59.0     | 65.2     | 49.5                  | 67.2        | 63.9        | 51.3        | 80.3           |
| Dyna-Gro                          | S31XF82  | 3.1 | RR2XF     | 58.1           | 55.3     | 59.4     | 46.4                  | 64.1        | 59.9        | 44.1        | 76.4           |
| NuTech/G2 Genetics                | 30N05E   | 3   | E3        | 57.2           | 55.8     | 59.3     | 44.4                  | 60.5        | 64.0        | 43.5        | 74.6           |
| Pioneer                           | P31A22X  | 3.1 | RR2X      | 57.0           | 52.4     | 59.3     | 46.3                  | 60.9        | 55.4        | 45.5        | 77.6           |
| NuTech/G2 Genetics                | 29N02E   | 2.9 | E3        | 57.0           | 55.1     | 62.3     | 45.9                  | 56.1        | 62.1        | 42.4        | 79.8           |
| Xitavo                            | XO 3131E | 3.1 | E3        | 56.6           | 55.1     | 59.9     | 46.8                  | 59.7        | 56.4        | 46.3        | 74.0           |
| P3 Genetics                       | 2331E    | 3.1 | E3        | 56.4           | 52.5     | 61.3     | 42.5                  | 57.2        | 60.9        | 46.3        | 76.4           |
| Xitavo                            | XO 2921E | 2.9 | E3        | 56.3           | 54.8     | 57.2     | 47.1                  | 61.5        | 55.4        | 46.8        | 71.2           |
| NuTech/G2 Genetics                | 31N06E   | 3.1 | E3        | 56.3           | 55.0     | 59.3     | 44.6                  | 63.0        | 57.5        | 44.3        | 73.1           |
| Xitavo                            | XO 2963E | 2.9 | E3        | 56.2           | 53.4     | 57.8     | 44.0                  | 59.0        | 60.2        | 42.0        | 75.1           |
| Viking                            | O.3118N  | 3.1 | Conv      | 55.6           | 51.3     | 57.6     | 43.3                  | 59.7        | 54.7        | 45.5        | 74.3           |
| Renk                              | G2960E   | 2.9 | E3        | 55.4           | 54.1     | 57.3     | 44.4                  | 57.2        | 56.9        | 43.5        | 73.7           |
| Virtue                            | V2922    | 2.9 | Conv      | 55.3           | 53.5     | 57.9     | 46.5                  | 54.4        | 59.3        | 42.4        | 74.5           |
| Dyna-Gro                          | S28EN22  | 2.8 | E3        | 54.9           | 51.8     | 59.0     | 39.4                  | 57.5        | 57.6        | 47.1        | 72.3           |
| Pioneer                           | P28A42X  | 2.8 | RR2X      | 54.7           | 51.2     | 55.9     | 44.3                  | 60.3        | 49.7        | 43.4        | 73.6           |
| Xitavo                            | XO 2832E | 2.8 | E3        | 54.3           | 51.5     | 55.7     | 44.4                  | 56.1        | 53.6        | 45.2        | 72.5           |
| P3 Genetics                       | 2229E    | 2.9 | E3        | 54.3           | 51.0     | 59.1     | 41.0                  | 54.7        | 54.7        | 44.6        | 75.1           |
| Dyna-Gro                          | S29EN62  | 2.9 | E3        | 54.2           | 49.7     | 58.6     | 41.0                  | 54.2        | 51.8        | 46.1        | 75.8           |
| <b>Experiment Mean</b>            |          |     |           | <b>58.3</b>    |          |          | <b>44.5</b>           | <b>59.1</b> | <b>57.4</b> | <b>45.0</b> | <b>75.0</b>    |
| <b>Minimum Mean</b>               |          |     |           | <b>48.9</b>    |          |          | <b>39.4</b>           | <b>54.2</b> | <b>49.7</b> | <b>42.0</b> | <b>71.2</b>    |
| <b>Maximum Mean</b>               |          |     |           | <b>63.6</b>    |          |          | <b>49.5</b>           | <b>67.2</b> | <b>64.0</b> | <b>51.3</b> | <b>80.3</b>    |
| <b>LSD(0.25)</b>                  |          |     |           | <b>2.2</b>     |          |          | <b>3.6</b>            | <b>2.0</b>  | <b>4.0</b>  | <b>2.7</b>  | <b>3.1</b>     |
| <b>Coefficient of Variability</b> |          |     |           | <b>5.6</b>     |          |          | <b>7.5</b>            | <b>3.5</b>  | <b>7.1</b>  | <b>5.8</b>  | <b>4.4</b>     |

**Table 11. South district, 2022 district and single-location means. Full-season test, MG > 3.2.**

| Company                           | Variety  | MG  | Herb Tech | District Means |          |          | Single Location Yield |             |             |             |                |
|-----------------------------------|----------|-----|-----------|----------------|----------|----------|-----------------------|-------------|-------------|-------------|----------------|
|                                   |          |     |           | Yield Bu/A     | SW Yield | SE Yield | Lewis                 | Corning     | Milo        | Batavia     | Crawfordsville |
| Dyna-Gro                          | S37XF33  | 3.7 | RR2XF     | 63.6           | 63.9     | 67.7     | 53.5                  | 64.4        | 74.3        | 48.1        | 77.9           |
| Dyna-Gro                          | S33EN42  | 3.3 | E3        | 63.5           | 63.7     | 67.3     | 51.5                  | 67.9        | 71.4        | 49.7        | 77.7           |
| Xitavo                            | XO 3803E | 3.8 | E3        | 63.1           | 60.7     | 63.4     | 54.5                  | 64.3        | 64.4        | 53.1        | 77.5           |
| Cornelius                         | CB37XF70 | 3.7 | RR2XF     | 63.1           | 64.4     | 63.7     | 55.5                  | 66.2        | 67.6        | 49.8        | 75.5           |
| Dyna-Gro                          | S37ES52  | 3.7 | E3        | 63.0           | 62.1     | 70.0     | 48.3                  | 65.6        | 70.9        | 53.4        | 76.6           |
| NuTech/G2 Genetics                | 39N07E   | 3.9 | E3        | 62.4           | 60.0     | 63.9     | 53.5                  | 65.9        | 63.8        | 49.6        | 79.5           |
| NuTech/G2 Genetics                | 34N02E   | 3.4 | E3        | 61.1           | 59.1     | 65.0     | 51.1                  | 64.6        | 63.8        | 48.8        | 76.4           |
| Xitavo                            | XO 3651E | 3.6 | E3        | 61.0           | 59.5     | 63.5     | 53.2                  | 61.2        | 61.5        | 48.5        | 82.2           |
| NuTech/G2 Genetics                | 37N01E   | 3.7 | E3        | 60.5           | 59.6     | 65.1     | 44.8                  | 62.5        | 68.2        | 51.7        | 76.1           |
| NuTech/G2 Genetics                | 39N04E   | 3.9 | E3        | 60.4           | 60.7     | 62.0     | 48.6                  | 64.3        | 63.6        | 46.8        | 78.3           |
| P3 Genetics                       | 2234E    | 3.4 | E3        | 60.3           | 57.4     | 60.5     | 50.0                  | 66.0        | 60.5        | 47.5        | 76.9           |
| Dyna-Gro                          | S33XF62  | 3.3 | RR2XF     | 60.1           | 57.4     | 61.7     | 49.2                  | 62.2        | 63.3        | 47.0        | 77.5           |
| Renk                              | G3760ES  | 3.7 | E3        | 59.9           | 60.9     | 62.8     | 45.7                  | 65.4        | 64.7        | 46.7        | 76.4           |
| Xitavo                            | XO 3861E | 3.8 | E3        | 59.9           | 57.9     | 62.5     | 47.8                  | 65.9        | 57.7        | 48.9        | 78.9           |
| Xitavo                            | XO 3922E | 3.9 | E3        | 59.6           | 58.4     | 62.5     | 47.3                  | 65.0        | 63.4        | 45.7        | 77.1           |
| Xitavo                            | XO 3752E | 3.7 | E3        | 59.5           | 58.9     | 64.3     | 44.3                  | 65.0        | 65.6        | 46.2        | 77.7           |
| NuTech/G2 Genetics                | 35N03E   | 3.5 | E3        | 59.4           | 56.7     | 62.6     | 49.5                  | 61.2        | 60.4        | 47.8        | 78.8           |
| Asgrow                            | AG39XF3  | 3.9 | RR2XF     | 59.3           | 61.6     | 63.4     | 48.5                  | 63.9        | 67.6        | 46.5        | 72.2           |
| Xitavo                            | XO 3341E | 3.3 | E3        | 59.2           | 59.1     | 59.5     | 52.7                  | 63.7        | 57.4        | 46.4        | 76.7           |
| P3 Genetics                       | 2039E    | 3.9 | E3        | 59.1           | 56.9     | 61.1     | 46.3                  | 63.6        | 63.4        | 47.4        | 74.2           |
| Xitavo                            | XO 3402E | 3.4 | E3        | 59.1           | 57.7     | 62.1     | 45.6                  | 65.0        | 61.6        | 49.4        | 73.7           |
| Pioneer                           | P33A53X  | 3.3 | RR2X      | 59.0           | 57.2     | 63.9     | 46.0                  | 64.3        | 59.2        | 47.4        | 76.7           |
| Xitavo                            | XO 3483E | 3.4 | E3        | 58.0           | 54.1     | 62.9     | 39.0                  | 61.8        | 61.5        | 46.6        | 81.0           |
| P3 Genetics                       | 2136E    | 3.6 | E3        | 57.5           | 55.1     | 61.1     | 44.1                  | 59.5        | 62.3        | 46.0        | 76.3           |
| Cornelius                         | CB39XF19 | 3.9 | RR2XF     | 56.9           | 58.7     | 59.8     | 48.3                  | 60.6        | 62.3        | 47.4        | 67.4           |
| Viking                            | O.3418N  | 3.4 | Conv      | 55.9           | 52.5     | 58.7     | 40.3                  | 64.7        | 53.3        | 46.1        | 75.3           |
| Pioneer                           | P37A27X  | 3.7 | RR2X      | 48.9           | 41.9     | 54.9     | 32.5                  | 47.4        | 42.5        | 46.7        | 70.6           |
| <b>Experiment Mean</b>            |          |     |           | <b>58.3</b>    |          |          | <b>47.8</b>           | <b>63.4</b> | <b>62.8</b> | <b>48.1</b> | <b>76.5</b>    |
| <b>Minimum Mean</b>               |          |     |           | <b>48.9</b>    |          |          | <b>32.5</b>           | <b>47.4</b> | <b>42.5</b> | <b>45.7</b> | <b>67.4</b>    |
| <b>Maximum Mean</b>               |          |     |           | <b>63.6</b>    |          |          | <b>55.5</b>           | <b>67.9</b> | <b>74.3</b> | <b>53.4</b> | <b>82.2</b>    |
| <b>LSD(0.25)</b>                  |          |     |           | <b>2.2</b>     |          |          | <b>3.6</b>            | <b>2.0</b>  | <b>4.0</b>  | <b>2.7</b>  | <b>3.1</b>     |
| <b>Coefficient of Variability</b> |          |     |           | <b>5.6</b>     |          |          | <b>7.5</b>            | <b>3.5</b>  | <b>7.1</b>  | <b>5.8</b>  | <b>4.4</b>     |



**Table 12. Entrant Information.**
**Asgrow: Bayer Crop Science, St. Louis, MO** [www.dekalbasgrowdeltapine.com](http://www.dekalbasgrowdeltapine.com) **(800) 768-6387**

| Variety | Herb Tech | Seed Treatment | North Early | North Full | Central Early | Central Full | South Early | South Full |
|---------|-----------|----------------|-------------|------------|---------------|--------------|-------------|------------|
| AG19XF3 | RR2XF     | ACL+ILVO       | X           |            |               |              |             |            |
| AG22XF3 | RR2XF     | ACL+ILVO       |             | X          |               |              |             |            |
| AG25XF3 | RR2XF     | ACL+ILVO       |             |            | X             |              |             |            |
| AG27XF3 | RR2XF     | ACL+ILVO       |             |            |               | X            |             |            |
| AG31XF3 | RR2XF     | ACL+ILVO       |             |            |               |              | X           |            |
| AG39XF3 | RR2XF     | ACL+ILVO       |             |            |               |              |             | X          |

**Cornelius: Cornelius Seed, Bellevue, IA** [www.corneliusseed.com](http://www.corneliusseed.com) **(800) 218-1862**

| Variety  | Herb Tech | Seed Treatment | North Early | North Full | Central Early | Central Full | South Early | South Full |
|----------|-----------|----------------|-------------|------------|---------------|--------------|-------------|------------|
| CB18XF88 | RR2XF     | PGP            | X           |            |               |              |             |            |
| CB21XF34 | RR2XF     | PGP            | X           |            |               |              |             |            |
| CB23XF63 | RR2XF     | PGP            |             | X          |               |              |             |            |
| CB24XF27 | RR2XF     | PGP            |             | X          |               |              |             |            |
| CB25XF99 | RR2XF     | PGP            |             |            | X             |              |             |            |
| CB27XF34 | RR2XF     | PGP            |             |            | X             |              |             |            |
| CB29XF35 | RR2XF     | PGP            |             |            |               | X            |             |            |
| CB31XF42 | RR2XF     | PGP            |             |            |               | X            |             |            |
| CB37XF70 | RR2XF     | PGP            |             |            |               |              |             | X          |
| CB39XF19 | RR2XF     | PGP            |             |            |               |              |             | X          |

**Dyna-Gro: Crop Production Services, Wall Lake, IA** [www.dynagroseed.com](http://www.dynagroseed.com) **(712) 664-2444**

| Variety | Herb Tech | Seed Treatment | North Early | North Full | Central Early | Central Full | South Early | South Full |
|---------|-----------|----------------|-------------|------------|---------------|--------------|-------------|------------|
| S19XF62 | RR2XF     | E-VIP+Salt     | X           |            |               |              |             |            |
| S20EN92 | E3        | E-VIP+Salt     | X           |            |               |              |             |            |
| S21EN81 | E3        | E-VIP+Salt     | X           |            |               |              |             |            |
| S23ES32 | E3        | E-VIP+Salt     |             | X          |               |              |             |            |
| S24XF12 | RR2XF     | E-VIP+Salt     |             | X          |               |              |             |            |
| S25EN02 | E3        | E-VIP+Salt     |             | X          | X             |              |             |            |
| S26EN53 | E3        | E-VIP+Salt     |             | X          | X             |              |             |            |
| S26XF42 | RR2XF     | E-VIP+Salt     |             |            | X             |              |             |            |
| S28EN22 | E3        | E-VIP+Salt     |             |            |               | X            | X           |            |
| S29EN62 | E3        | E-VIP+Salt     |             |            |               | X            | X           |            |
| S31XF82 | RR2XF     | E-VIP+Salt     |             |            |               |              | X           |            |
| S33EN42 | E3        | E-VIP+Salt     |             |            |               |              |             | X          |
| S33XF62 | RR2XF     | E-VIP+Salt     |             |            |               |              |             | X          |
| S37ES52 | E3        | E-VIP+Salt     |             |            |               |              |             | X          |
| S37XF33 | RR2XF     | E-VIP+Salt     |             |            |               |              |             | X          |

**Illini Brand: Baird Seed Company, Williamsfield, IL** [www.bairdseedcompany.com](http://www.bairdseedcompany.com) **(309) 639-2248**

| Variety | Herb Tech | Seed Treatment | North Early | North Full | Central Early | Central Full | South Early | South Full |
|---------|-----------|----------------|-------------|------------|---------------|--------------|-------------|------------|
| 2043Na  | Conv      | CMV            | X           |            |               |              |             |            |
| 2398N   | Conv      | CMV            |             | X          |               |              |             |            |
| 2643N   | Conv      | CMV            |             | X          |               |              |             |            |
| 2904N   | Conv      | CMV            |             |            |               | X            |             |            |
| 3267N   | Conv      | CMV            |             |            |               | X            |             |            |

**Table 12. Entrant Information.** *Continued*

| <b>Golden Harvest: Syngenta, Minnetonka, MN</b>       |           |                | <b>www.goldenharvestseeds.com</b> |            |               |              | <b>(612) 656-8152</b> |            |
|-------------------------------------------------------|-----------|----------------|-----------------------------------|------------|---------------|--------------|-----------------------|------------|
| Variety                                               | Herb Tech | Seed Treatment | North Early                       | North Full | Central Early | Central Full | South Early           | South Full |
| GH1973E3S                                             | E3S       | CMV+Salt       | X                                 |            |               |              |                       |            |
| GH2083E3S                                             | E3S       | CMV+Salt       | X                                 |            |               |              |                       |            |
| GH2292E3                                              | E3        | CMV+Salt       | X                                 |            | X             |              |                       |            |
| GH2313XF                                              | RR2XF     | CMV+Salt       |                                   | X          | X             |              |                       |            |
| GH2653XF                                              | RR2XF     | CMV+Salt       |                                   | X          | X             |              |                       |            |
| GH2722XF                                              | RR2XF     | CMV+Salt       |                                   |            |               | X            |                       |            |
| GH2922E3                                              | E3        | CMV+Salt       |                                   |            |               | X            |                       |            |
| <b>Iowa State: Iowa State University, Ames, IA</b>    |           |                | <b>www.CAD.iastate.edu</b>        |            |               |              | <b>(515) 294-9442</b> |            |
| Variety                                               | Herb Tech | Seed Treatment | North Early                       | North Full | Central Early | Central Full | South Early           | South Full |
| IAS19C3                                               | Conv      | CMV            | X                                 |            |               |              |                       |            |
| IAS25C1                                               | Conv      | CMV            |                                   | X          | X             |              |                       |            |
| IAS31C1                                               | Conv      | CMV            |                                   |            |               | X            |                       |            |
| <b>Legacy Seeds: Legacy Seeds, Scandinavia, WI</b>    |           |                | <b>www.legacyseeds.com</b>        |            |               |              | <b>(866) 791-6390</b> |            |
| Variety                                               | Herb Tech | Seed Treatment | North Early                       | North Full | Central Early | Central Full | South Early           | South Full |
| LC260-21C                                             | Conv      | L-CT           |                                   | X          |               |              |                       |            |
| <b>LOYAL: Legacy Seeds, Scandinavia, WI</b>           |           |                | <b>www.legacyseeds.com</b>        |            |               |              | <b>(866) 791-6390</b> |            |
| Variety                                               | Herb Tech | Seed Treatment | North Early                       | North Full | Central Early | Central Full | South Early           | South Full |
| L1950E                                                | E3        | L-CT           | X                                 |            |               |              |                       |            |
| L2150E                                                | E3        | L-CT           | X                                 |            |               |              |                       |            |
| L2250E                                                | E3        | L-CT           | X                                 |            |               |              |                       |            |
| L2550E                                                | E3        | L-CT           |                                   | X          |               |              |                       |            |
| <b>NuTech/G2 Genetics: NuTech Seed, LLC, Ames, IA</b> |           |                | <b>www.nutechseed.com</b>         |            |               |              | <b>(515) 232-1997</b> |            |
| Variety                                               | Herb Tech | Seed Treatment | North Early                       | North Full | Central Early | Central Full | South Early           | South Full |
| 16N04E                                                | E3        | LMGN           | X                                 |            |               |              |                       |            |
| 19N03E                                                | E3        | LMGN           | X                                 |            |               |              |                       |            |
| 21N07E                                                | E3        | LMGN           | X                                 |            |               |              |                       |            |
| 24N04E                                                | E3        | LMGN           |                                   | X          | X             |              |                       |            |
| 25N04E                                                | E3        | LMGN           |                                   | X          | X             |              |                       |            |
| 26N06E                                                | E3        | LMGN           |                                   | X          |               |              |                       |            |
| 27N03E                                                | E3        | LMGN           |                                   | X          | X             |              |                       |            |
| 29N02E                                                | E3        | LMGN           |                                   |            |               | X            | X                     |            |
| 30N05E                                                | E3        | LMGN           |                                   |            |               | X            | X                     |            |
| 31N06E                                                | E3        | LMGN           |                                   |            |               | X            | X                     |            |
| 34N02E                                                | E3        | LMGN           |                                   |            |               |              |                       | X          |
| 35N03E                                                | E3        | LMGN           |                                   |            |               |              |                       | X          |
| 37N01E                                                | E3        | LMGN           |                                   |            |               |              |                       | X          |
| 39N04E                                                | E3        | LMGN           |                                   |            |               |              |                       | X          |
| 39N07E                                                | E3        | LMGN           |                                   |            |               |              |                       | X          |

**Table 12. Entrant Information.** *Continued***P3 Genetics: Cornelius Seed, Bellevue, IA****www.corneliusseed.com****(800) 218-1862**

| Variety | Herb Tech | Seed Treatment | North Early | North Full | Central Early | Central Full | South Early | South Full |
|---------|-----------|----------------|-------------|------------|---------------|--------------|-------------|------------|
| 1928E   | E3        | PGP            |             |            |               | X            |             |            |
| 2039E   | E3        | PGP            |             |            |               |              |             | X          |
| 2136E   | E3        | PGP            |             |            |               |              |             | X          |
| 2218E   | E3        | PGP            | X           |            |               |              |             |            |
| 2223E   | E3        | PGP            |             | X          | X             |              |             |            |
| 2229E   | E3        | PGP            |             |            |               | X            | X           |            |
| 2234E   | E3        | PGP            |             |            |               |              |             | X          |
| 2320E   | E3        | PGP            | X           |            |               |              |             |            |
| 2322E   | E3        | PGP            | X           |            |               |              |             |            |
| 2326E   | E3        | PGP            |             | X          | X             |              |             |            |
| 2331E   | E3        | PGP            |             |            |               | X            | X           |            |

**Pioneer: Corteva, Johnston, IA****www.pioneer.com****(800) 233-7333**

| Variety | Herb Tech | Seed Treatment | North Early | North Full | Central Early | Central Full | South Early | South Full |
|---------|-----------|----------------|-------------|------------|---------------|--------------|-------------|------------|
| P21A28X | RR2X      | CMV            | X           |            |               |              |             |            |
| P23A15X | RR2X      | CMV            |             | X          | X             |              |             |            |
| P25A04X | RR2X      | CMV            |             | X          | X             |              |             |            |
| P27A17X | RR2X      | CMV            |             | X          | X             |              |             |            |
| P28A42X | RR2X      | CMV            |             |            |               | X            | X           |            |
| P31A22X | RR2X      | CMV            |             |            |               | X            | X           |            |
| P33A53X | RR2X      | CMV            |             |            |               |              |             | X          |
| P37A27X | RR2X      | CMV            |             |            |               |              |             | X          |

**Renk: Renk Seed Co., Sun Prairie, WI****www.renkseed.com****(800) BUY RENK**

| Variety | Herb Tech | Seed Treatment | North Early | North Full | Central Early | Central Full | South Early | South Full |
|---------|-----------|----------------|-------------|------------|---------------|--------------|-------------|------------|
| G2150E  | E3        | CMV+Salt       | X           |            |               |              |             |            |
| G2270E  | E3        | CMV+Salt       | X           |            |               |              |             |            |
| G2550E  | E3        | CMV+Salt       |             | X          | X             |              |             |            |
| G2570ES | E3        | CMV+Salt       |             | X          | X             |              |             |            |
| G2960E  | E3        | CMV+Salt       |             |            |               | X            | X           |            |
| G3760ES | E3        | CMV+Salt       |             |            |               |              |             | X          |

**Titan Pro: Titan Pro SCI, Inc. Clear Lake, IA****www.titanprosci.com****(641) 357-7283**

| Variety  | Herb Tech | Seed Treatment | North Early | North Full | Central Early | Central Full | South Early | South Full |
|----------|-----------|----------------|-------------|------------|---------------|--------------|-------------|------------|
| TP 18E22 | E3        | CM             | X           |            |               |              |             |            |
| TP 20E22 | E3        | CM             | X           |            |               |              |             |            |
| TP 25E22 | E3        | CM             |             |            | X             |              |             |            |

**Table 12. Entrant Information.** *Continued*

| <b>Viking: Albert Lea Seed House, Albert Lea, MN</b> |           |                | <b>www.alseed.com</b> |            |               |              | <b>(800) 352-5247</b> |            |
|------------------------------------------------------|-----------|----------------|-----------------------|------------|---------------|--------------|-----------------------|------------|
| Variety                                              | Herb Tech | Seed Treatment | North Early           | North Full | Central Early | Central Full | South Early           | South Full |
| 2022N                                                | Conv      | CM             | X                     |            |               |              |                       |            |
| 2155N                                                | Conv      | CM             | X                     |            |               |              |                       |            |
| 2340KN                                               | Conv      | CM             |                       | X          |               |              |                       |            |
| 2418N                                                | Conv      | CM             |                       | X          | X             |              |                       |            |
| O.2244AT                                             | Conv      | CM             | X                     |            |               |              |                       |            |
| O.2702                                               | Conv      | CM             |                       | X          | X             |              |                       |            |
| O.3118N                                              | Conv      | CM             |                       |            |               | X            | X                     |            |
| O.3418N                                              | Conv      | CM             |                       |            |               |              |                       | X          |

| <b>Virtue Seeds: DonMario Semillas, Champaign, IL</b> |           |                | <b>www.virtuseeds.com</b> |            |               |              | <b>(217) 560-6371</b> |            |
|-------------------------------------------------------|-----------|----------------|---------------------------|------------|---------------|--------------|-----------------------|------------|
| Variety                                               | Herb Tech | Seed Treatment | North Early               | North Full | Central Early | Central Full | South Early           | South Full |
| V2122                                                 | Conv      | CMV            | X                         |            |               |              |                       |            |
| V2423                                                 | Conv      | CMV            |                           |            | X             |              |                       |            |
| V2922                                                 | Conv      | CMV            |                           |            |               |              | X                     |            |

| <b>Xitavo: M.S. Technologies, LLC, West Point, IA</b> |           |                | <b>www.xitavosoybeanseed.com</b> |            |               |              | <b>(800) 362-2510</b> |            |
|-------------------------------------------------------|-----------|----------------|----------------------------------|------------|---------------|--------------|-----------------------|------------|
| Variety                                               | Herb Tech | Seed Treatment | North Early                      | North Full | Central Early | Central Full | South Early           | South Full |
| XO 1632E                                              | E3        | PV+ILVO        | X                                |            |               |              |                       |            |
| XO 1761E                                              | E3        | PV+ILVO        | X                                |            |               |              |                       |            |
| XO 1822E                                              | E3        | PV+ILVO        | X                                |            |               |              |                       |            |
| XO 1971E                                              | E3        | PV+ILVO        | X                                |            |               |              |                       |            |
| XO 2181E                                              | E3        | PV+ILVO        | X                                |            |               |              |                       |            |
| XO 2282E                                              | E3        | PV+ILVO        | X                                |            |               |              |                       |            |
| XO 2323E                                              | E3        | PV+ILVO        |                                  | X          | X             |              |                       |            |
| XO 2472E                                              | E3        | PV+ILVO        |                                  | X          | X             |              |                       |            |
| XO 2501E                                              | E3        | PV+ILVO        |                                  | X          | X             |              |                       |            |
| XO 2613E                                              | E3        | PV+ILVO        |                                  | X          | X             |              |                       |            |
| XO 2832E                                              | E3        | PV+ILVO        |                                  |            |               | X            | X                     |            |
| XO 2921E                                              | E3        | PV+ILVO        |                                  |            |               | X            | X                     |            |
| XO 2963E                                              | E3        | PV+ILVO        |                                  |            |               | X            | X                     |            |
| XO 3131E                                              | E3        | PV+ILVO        |                                  |            |               | X            | X                     |            |
| XO 3341E                                              | E3        | PV+ILVO        |                                  |            |               |              |                       | X          |
| XO 3402E                                              | E3        | PV+ILVO        |                                  |            |               |              |                       | X          |
| XO 3483E                                              | E3        | PV+ILVO        |                                  |            |               |              |                       | X          |
| XO 3651E                                              | E3        | PV+ILVO        |                                  |            |               |              |                       | X          |
| XO 3752E                                              | E3        | PV+ILVO        |                                  |            |               |              |                       | X          |
| XO 3803E                                              | E3        | PV+ILVO        |                                  |            |               |              |                       | X          |
| XO 3861E                                              | E3        | PV+ILVO        |                                  |            |               |              |                       | X          |
| XO 3922E                                              | E3        | PV+ILVO        |                                  |            |               |              |                       | X          |



## *Iowa's Official Variety Trials*



**IOWA STATE UNIVERSITY**  
**Department of Agronomy**

*A summary of replicated research by Iowa Crop Improvement Association.*