**2021 SH2 Sweet Corn**

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Sweet corn is an important crop in both the fresh market and shipping market in North Central Ohio, where a significant percentage of Ohio vegetables are grown. Many different varieties of sweet corn are grown by producers with fresh market roadside stands, and still others are grown for early, mid, and late season shipping and processing markets, meaning growers demand a diverse selection of sweet corn varieties and maturities. Growers have indicated this diversity should focus on SH2 varieties with different stages of maturity, and variance in other traits. Many new varieties are becoming available to meet these grower demands, and this study sought to determine which ones would perform acceptably in Northern Ohio, and which would have the desired traits growers are seeking. For this trial, 43 SH2 varieties were grown in 4 replicated plots at the Ohio State University’s North Central Agricultural Research Station near Fremont, Ohio.

**Materials and Methods**

The purpose of this trial was to evaluate a significant number of newer varieties of sweet corn, helping seed companies determine which varieties would be suitable to continue breeding and developing for commercial seed sales, and helping growers determine which currently available varieties would be best suited for their specific market demands, including fresh market, shipping, and processing.

Growers and seed companies suggested varieties to be grown, with a strong preference for inclusion given to new and experimental varieties, for comparison alongside industry standard varieties. The evaluation used four replicated plots, grown under best management practices, to give growers a fair comparison of the different varieties grown on lakebed soils, within a normal Northern Ohio growing season. Plots were planted in 30-foot rows, with blocks of 4 rows per variety, replicated 4 times, using randomized variety location within each replication. The centered 2 rows of each plot were harvested for data collection. After germination and stand counts, rows were trimmed to 25 feet. Plots were not thinned this year.

The SH2 trial was conducted on Colwood fine sandy loam soil on field AW at the North Central Agricultural Research Station. Best management practices were utilized prior to and during the trial. On October 9, 2020 the test site was disked and seeded to a cover crop of winter wheat. The cover crop was terminated on March 23, 2021 using a treatment of 32 oz/acre Roundup Powermax and 8 oz/ acre Choice Weathermaster. On April 26, 2021 dry fertilizer consisting of 250 lbs./ acre 46-0-0, 100 lbs./acre 10-52-0, 500 lbs./acre 0-0-60, and 10 lbs./acre 10% granular boron was spread on the test site. The site was worked the same day using a Landoll Finish-All with a rolling basket.

On May 17, 2021 the test plot was planted in 30” rows using a John Deere 7000 planter with Almaco units for the test varieties. A herbicide application of 20 oz/ acre Dual II Magnum, 22 oz/acre Roundup Powermax, 10.9 oz./acre Clasp was made on May 19, 2021. On June 7, 2021, the plot was side dressed using 35 gal/acre 28% N. The plot was cultivated on June 11, 2021 using a Danish Tine cultivator. A second herbicide application consisting of 16 oz/acre Basagran, 16 oz/acre Atrazine 4L, and 32 oz/acre Crop Oil.

Electric fence was installed around the entire trial on July 20 to protect against wildlife damage. No fungicide applications were made.

Insecticide applications were made as follows:

7/21/21 5 oz/acre Coragen

7/23/21 1.5 pt./acre Lannate LV and 6 oz/acre Radiant

7/27/21 2.8 oz/acre Baythroid XL

7/30/21 5 oz/acre Coragen and 1.5 pt/acre Lannate LV

8/6/21 6.0 /acre Radiant

**Results and Discussion**

Emergence was rapid and even throughout the trial with the exception of variety #7. #7 was extremely slow to emerge and lagged behind the entire growing season.

Sweet corn plants were evaluated at harvest for the following characteristics, which are summarized in the tables: ease of harvesting ear (snap rating), ear height, stand population, harvested dozens per acres, and marketable dozens per acre. Immediately following harvest, 5 random marketable ears per variety were evaluated for flags, husk cover, tip fill, number of kernel rows/ear, kernel color, ear length, ear diameter, tenderness, sweetness, and overall flavor.

Results of the harvest and ear evaluation for each variety of sweet corn can be seen in the tables below, with total harvest data compiled and averaged from all four plots harvested. When interpreting yield data, it should be noted that populations varied significantly in our plot this season. In determining the ear evaluation scores, a team of 5 individuals, including the principal investigator and 2 members of the research station staff and two student employees each made their individual rankings on the 5 ears for each characteristic, and the final reported value was the combined average individual scores. This process held true for the tenderness, sweetness, and overall flavor scores as well, determined by raw taste testing of the 5 aforementioned individuals.

Rainfall (in inches) from planting May 23 to first harvest -

5/23/21 .70

5/26/21 .60

5/28/21 .80

6/2/21 1.20

6/7/21 .35

6/8/21 .20

6/9/21 .05

6/18/21 .20

6/21/21 .40

6/27/21 .80

6/28/21 .05

6/29/21 .70

6/30/21 1.50

7/1/21 .45

7/7/21 .40

7/11/21 .55

7/12/21 .30

7/13/21 .30

7/15/21 .10

7/17/21 3.0

7/25/21 .85

**TOTAL: 13.5**

**Table 1.** Variety characteristics, emergence, observed maturity, and individual ear yield. All varieties planted on May

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Variety # | Variety Name | Color | Listed Maturity | Harvest Date | Observed Maturity |
| 1 | SVSA0313 | bi-color | 74 | 8/6/21 | 81 |
| 2 | Skyray | bi-color | 78 | 8/4/21 | 79 |
| 3 | EXO8767143 | bi-color | 81 | 8/9/21 | 84 |
| 4 | SVSA94 | bi-color | 74 | 8//21 | 81 |
| 5 | Affection | bi-color | 78 | 8/9/21 | 84 |
| 6 | SV1580SC | White | 79 | 8/9/21 | 84 |
| 7 | SVSC9956T | White | 79 | 8/11/21 | 86 |
| 8 | BSS2543 | bi-color | 82 | 8/11/21 | 86 |
| 9 | BS32755 | bi-color | 79 | 8/6/21 | 81 |
| 10 | BSS30511/Attibute | bi-color | 78 | 8/11/21 | 86 |
| 11 | Crave | bi-color | 78 | 8/4/21 | 79 |
| 12 | Patriarch/Attibute | bi-color | 78 | 8/2/21 | 79 |
| 13 | Flagler | bi-color | 76 | 8/4/21 | 79 |
| 14 | HMX59YS826 | Yellow | 74 | 8/2/21 | 77 |
| 15 | Solstice | bi-color | 70 | 7/30/21 | 74 |
| 16 | Nirvana | bi-color | 74 | 8/2/21 | 77 |
| 17 | Epiphany | bi-color | 75 | 8/2/21 | 77 |
| 18 | Eden RMN | White | 75 | 8/6/21 | 81 |
| 19 | Xanadu | bi-color | 75 | 8/2/21 | 77 |
| 20 | Octane | bi-color | 78 | 8/11/21 | 86 |
| 21 | Ignition | bi-color | 72 | 8/2/21 | 77 |
| 22 | Catalyst | bi-color | 66 | 7/27/21 | 71 |
| 23 | Kickoff | bi-color | 69 | 7/27/21 | 71 |
| 24 | Signature | bi-color | 72 | 8/2/21 | 77 |
| 25 | Xtra Tender 2472 | bi-color | 72 | 7/30/21 | 74 |
| 26 | Anthem | bi-color | 73 | 8/2/21 | 77 |
| 27 | Xtra Tender 274A | bi-color | 74 | 7/30/21 | 74 |
| 28 | American Dream | bi-color | 77 | 8/4/21 | 79 |
| 29 | Aces | bi-color | 78 | 8/2/21 | 77 |
| 30 | AP358 | bi-color | 78 | 8/2/21 | 77 |
| 31 | Cadence | bi-color | 78 | 8/2/21 | 77 |
| 32 | Enchanted | bi-color | 79 | 8/4/21 | 79 |
| 33 | Freedom | White | 73 | 7/30/21 | 74 |
| 34 | XTH3674 | White | 74 | 7/30/21 | 74 |
| 35 | 7401IMP | White | 75 | 8/4/21 | 79 |
| 36 | Glacial | White | 76 | 8/6/21 | 81 |
| 37 | Xtra Tender 1572 | Yellow | 72 | 7/30/21 | 74 |
| 38 | SC 1336 | Yellow | 81 | 8/6/21 | 81 |
| 39 | Sprinter XR | Yellow | 69 | 7//27/21 | 71 |
| 40 | Platinum XR | White | 80 | 8/9/21 | 84 |
| 41 | Bullet XR | Yellow | 76 | 8/2/21 | 77 |
| 42 | Takeoff | Yellow | 69 | 7/30/21 | 74 |
| 43 | Nighthawk | bi-color | 68 | 7/30/21 | 74 |

**Table 2.** Harvest Data. Populations varied significantly. Plots were not thinned as in past years.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Variety # | Variety Name | Ear Height (in.) | Snap | Harvested Dozen/acre | Marketable Dozen/acre |
| 1 | SVSA0313 | 22 | 3.25 | 1972 | 1943 |
| 2 | Skyray | 25 | 3.5 | 2175 | 2117 |
| 3 | EXO8767143 | 20 | 4.0 | 2088 | 2030 |
| 4 | SVSA9495T | 21 | 3.25 | 2030 | 1972 |
| 5 | Affection | 22 | 3.0 | 2146 | 2088 |
| 6 | SV1580SC | 24 | 3.75 | 2233 | 2175 |
| 7 | SVSC9956T | 24 | 3.75 | 1798 | 1740 |
| 8 | BSS2543 | 24 | 3.5 | 1972 | 1943 |
| 9 | BS32755 | 24 | 3.25 | 2059 | 2001 |
| 10 | BSS30511/Attibute | 26 | 3.75 | 2088 | 2030 |
| 11 | Crave | 24 | 3.25 | 2146 | 2117 |
| 12 | Patriarch/Attibute | 25 | 3.25 | \* | \*\* |
| 13 | Flagler | 26 | 2.75 | 2088 | 2059 |
| 14 | HMX59YS826 | 25 | 2.5 | \* | \*\* |
| 15 | Solstice | 20 | 3 | 1769 | 1740 |
| 16 | Nirvana | 22 | 3.75 | \* | \*\* |
| 17 | Epiphany | 23 | 3.5 | \* | \*\* |
| 18 | Eden RMN | 20 | 3.25 | 2088 | 2059 |
| 19 | Xanadu | 24 | 4.0 | \* | \*\* |
| 20 | Octane | 25 | 3.75 | 1972 | 1856 |
| 21 | Ignition | 25 | 3 | \* | \*\* |
| 22 | Catalyst | 24 | 4 | 2262 | 2233 |
| 23 | Kickoff | 24 | 4 | 1943 | 1885 |
| 24 | Signature | 24 | 3.75 | \* | \*\* |
| 25 | Xtra Tender 2472 | 20 | 3.5 | 2146 | 2117 |
| 26 | Anthem | 24 | 3.5 | \* | \*\* |
| 27 | Xtra Tender 274A | 21 | 3.5 | 2117 | 2059 |
| 28 | American Dream | 26 | 3.25 | 2088 | 2030 |
| 29 | Aces | 24 | 3.0 | \* | \*\* |
| 30 | AP 358 | 20 | 3.75 | \* | \*\* |
| 31 | Cadence | 28 | 3.5 | \* | \*\* |
| 32 | Enchanted | 28 | 3.5 | 2204 | 2175 |
| 33 | Freedom | 22 | 3 | 2001 | 1914 |
| 34 | XTH3674 | 21 | 3 | 2088 | 2059 |
| 35 | 7401 IMP | 22 | 4.0 | 2030 | 1972 |
| 36 | Glacial | 24 | 4.0 | 2059 | 2030 |
| 37 | Xtra Tender 1572 | 22 | 3 | 2146 | 2088 |
| 38 | SC 1336 | 26 | 3.0 | 2262 | 2204 |
| 39 | Sprinter XR | 21 | 3 | 1914 | 1856 |
| 40 | Platinum XR | 24 | 3.25 | 1856 | 1827 |
| 41 | Bullet XR | 25 | 3.0 | \* | \*\* |
| 42 | Takeoff | 2469 | 3 | 1885 | 1827 |
| 43 | Nighthawk | 2168 | 4 | 2320 | 2262 |

**Ear Height =** Height in inches\* = >1800

**Snap Rating =** 1 difficult - 5 easy \*\* = >1800

**Table 3.** Ear Evaluation. \*All data is reported as the average rating of 10 ears from each variety

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Variety | Variety Name | Husk Cover | Flags | Overall Husk | Shank | Tip Fill | Rows \* | Rowing | Color | Length  (inches) | Diameter  (inches) |
| 1 | SVSA0313 | 3.25 | 3.0 | 3.0 | 3.25 | 3.75 | 16-18 | 2.25 | 3.25 | 8.4 | 2.0 |
| 2 | Skyray | 3.0 | 3.25 | 3.0 | 3.25 | 3.25 | 18 | 3.25 | 2.75 | 8.1 | 1.9 |
| 3 | EXO8767143 | 1.0 | 2.25 | 1.0 | 3.0 | 4 | 18-20 | 3 | 4 | 8.2 | 2.0 |
| 4 | SVSA9495T | 3.0 | 3.5 | 3.0 | 3.5 | 3.5 | 18-20 | 2 | 4 | 8.2 | 2.0 |
| 5 | Affection | 2.0 | 2.5 | 2.0 | 1.75 | 3.5 | 16-18 | 3.5 | 3.5 | 7.8 | 1.9 |
| 6 | SV1580SC | 1.5 | 2.5 | 1.75 | 2.5 | 3 | 16-18 | 3.5 | 3.5 | 8.2 | 1.8 |
| 7 | SVSC9956T | 2.5 | 3.25 | 2.75 | 3.25 | 2.75 | 18-20 | 3.5 | 3.5 | 8.2 | 1.9 |
| 8 | BSS2543 | 2.0 | 3.25 | 2.0 | 3.25 | 3 | 18-20 | 4 | 2.25 | 8.2 | 2.0 |
| 9 | BS32755 | 2.0 | 2.0 | 2.0 | 1.5 | 3.5 | 18-20 | 3 | 3 | 7.9 | 2.0 |
| 10 | BSS30511/Attibute | 2.5 | 2.5 | 2.0 | 3.0 | 2.25 | 20-22 | 2 | 2.75 | 8.2 | 2.1 |
| 11 | Crave | 2.25 | 3.0 | 2.75 | 2.75 | 3 | 16-18 | 4 | 3.25 | 8.1 | 2.0 |
| 12 | Patriarch/Attibute | 2.0 | 2.5 | 2.0 | 3.5 | 3.5 | 16-18 | 3.5 | 3.5 | 7.9 | 2.1 |
| 13 | Flagler | 2.5 | 3.5 | 2.75 | 2.75 | 3 | 18-20 | 2 | 3.75 | 8.2 | 2.0 |
| 14 | HMX59YS826 | 3.0 | 3.5 | 3.5 | 3.75 | 3.25 | 18-20 | 3 | 4 | 8.1 | 2.0 |
| 15 | Solstice | 3.0 | 3.0 | 3.0 | 2.5 | 3.0 | 16-18 | 2.0 | 3.5 | 7.9 | 1.9 |
| 16 | Nirvana | 2.5 | 3.0 | 3.0 | 2.25 | 3.5 | 16-18 | 3.5 | 3.5 | 8.1 | 2.0 |
| 17 | Epiphany | 2.5 | 2.5 | 2.5 | 3.25 | 3.75 | 16-18 | 3.25 | 4 | 7.9 | 2.1 |
| 18 | Eden RMN | 1.0 | 3.0 | 1.5 | 2.0 | 3.75 | 16-18 | 3 | 4 | 7.9 | 1.9 |
| 19 | Xanadu | 2.0 | 2.0 | 2.0 | 2.0 | 3.5 | 16-18 | 3 | 3 | 7.9 | 1.9 |
| 20 | Octane | .5 | 2.0 | 1.0 | 2.75 | 3 | 16-20 | 2.75 | 2.75 | 8.2 | 1.9 |
| 21 | Ignition | 3.0 | 2 | 2 | 3 | 3 | 18-20 | 3 | 3.5 | 7.9 | 2.0 |
| 22 | Catalyst | 4.0 | 4.0 | 4.0 | 3.5 | 4 | 12-14 | 4 | 4 | 8.2 | 2.0 |
| 23 | Kickofff | 3.0 | 3.5 | 3.0 | 3.0 | 2.5 | 18 | 2.5 | 3.5 | 8.1 | 2.0 |
| 24 | Signature | 3.25 | 2.5 | 3.0 | 3.5 | 3.5 | 16-18 | 2.5 | 3.5 | 7.8 | 2.1 |
| 25 | Xtra Tender 2472 | 3.0 | 2.0 | 32.5 | 3.0 | 2.5 | 16-18 | 2.5 | 3 | 8.2 | 1.9 |
| 26 | Anthem | 3.25 | 3.25 | 3.25 | 2.5 | 4 | 16-18 | 3.5 | 3.75 | 7.8 | 2.0 |
| 27 | Xtra Tender 274A | 3.25 | 3.5 | 3.25 | 3.75 | 3.25 | 18-20 | 2.0 | 4.0 | 8.1 | 2.1 |
| 28 | American Dream | 2.25 | 3.5 | 2.5 | 3 | 3.25 | 16-18 | 4 | 3 | 7.8 | 1.9 |
| 29 | Aces | 2.5 | 3 | 2.75 | 3.75 | 3.5 | 16-18 | 3.5 | 2.5 | 8.2 | 1.8 |
| 30 | AP 358 | 3.0 | 2.5 | 2.5 | 3.0 | 3.5 | 16 | 3 | 3 | 8.1 | 1.9 |
| 31 | Cadence | 3.0 | 2.75 | 3.0 | 3.5 | 3.5 | 18-20 | 3 | 3.5 | 8.1 | 1.9 |
| 32 | Enchanted | 2.0 | 3.0 | 2.5 | 2.75 | 3 | 18-20 | 3 | 3.75 | 8.2 | 2.1 |
| 33 | Freedom | 2.25 | 3.5 | 3.0 | 3.5 | 3.5 | 18-20 | 2.25 | 3.5 | 7.9 | 1.9 |
| 34 | XTH3674 | 3.0 | 2.25 | 3.0 | 3.0 | 4.0 | 18 | 3.0 | 3.25 | 7.8 | 1.9 |
| 35 | 7401 IMP | 1.5 | 2.75 | 2.0 | 2.5 | 3.5 | 18-20 | 3 | 4 | 8.2 | 1.9 |
| 36 | Glacial | 2.5 | 3.5 | 3.0 | 3.0 | 3.75 | 18-20 | 3.5 | 4 | 8.2 | 2.0 |
| 37 | Xtra Tender 1572 | 2.25 | 3.75 | 3.0 | 3.25 | 3.25 | 16-18 | 2.5 | 2.5 | 7.9 | 1.9 |
| 38 | SC 1336 | 2.0 | 2.0 | 2.0 | 3.0 | 3.5 | 20-24 | 2 | 4 | 8.1 | 2.0 |
| 39 | Sprinter XR | 3.0 | 2.0 | 2.5 | 2.5 | 3.0 | 14-16 | 3.5 | 4 | 7.9 | 1.8 |
| 40 | Platinum XR | 1.5 | 4.0 | 2.0 | 5.0 | 4.0 | 16-18 | 2.25 | 3 | 8.4 | 2.1 |
| 41 | Bullet XR | 3.0 | 3.0 | 2.5 | 3.5 | 3.5 | 16-18 | 2.75 | 4 | 7.8 | 2.0 |
| 42 | Takeoff | 3.25 | 3.0 | 3.0 | 3.25 | 3.5 | 16-18 | 2.5 | 4.0 | 8.3 | 2.0 |
| 43 | Nighthawk | 2.0 | 3.0 | 3.0 | 3.0 | 3.5 | 16-18 | 3.25 | 3.5 | 8.1 | 1.9 |

**Rating Scale for Table 3 \*All scores are reported as the average of 10 ears from each variety**

|  |  |  |  |
| --- | --- | --- | --- |
| **Rating Scale** | **1** | **3** | **5** |
| **Husk Cover (at tip)** | Exposed | 2 fingers of cover | 4 fingers of cover |
| **Flags** | None | Noticeable/attractive | Many, long, attractive |
| **Overall Husk** | Poor | Good | Outstanding |
| **Shank** | Short | Average | Long |
| **Tip Fill** | 2 in. blank | 1 in. blank | Complete |
| **Rows** | number of rows around entire cob | |  |
| **Rowing** | Scrambled | Mainly straight | All straight |
| **Color** | Dull/flat | Average | Bright/attractive |
| **Length** | measured from tip to base of shank with husk removed | | |
| **Diameter** | measured at center of cob with husk removed | |  |

**Table 4.** SH2 Ear Evaluation. \*All data is reported as the average rating of 5 ears from each variety

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Variety # | Variety Name | Tenderness | Sweetness | Flavor |
| 1 | SVSA0313 | 2.5 | 3 | 2.5 |
| 2 | Skyray | 3.25 | 3 | 2.75 |
| 3 | EXO8767143 | 2 | 2.75 | 2.25 |
| 4 | SVSA9495T | 2.25 | 2.25 | 2.75 |
| 5 | Affection | 3.25 | 3 | 3.25 |
| 6 | SV1580SC | 2.75 | 2.5 | 3 |
| 7 | SVSC9956T | 2.75 | 2.25 | 1.5 |
| 8 | BSS2543 | 2.25 | 2 | 1.5 |
| 9 | BS32755 | 3.5 | 3.5 | 3 |
| 10 | BSS30511/Attibute | 2.75 | 2.75 | 3 |
| 11 | Crave | 3 | 3.75 | 3.75 |
| 12 | Patriarch/Attibute | 2.5 | 2.5 | 3 |
| 13 | Flagler | 2.75 | 3.25 | 3.5 |
| 14 | HMX59YS826 | 3.5 | 4 | 4 |
| 15 | Solstice | 4 | 3.75 | 3.75 |
| 16 | Nirvana | 3.5 | 3.75 | 3.5 |
| 17 | Epiphany | 3.75 | 4 | 4 |
| 18 | Eden RMN | 2.75 | 3 | 2.5 |
| 19 | Xanadu | 3.75 | 4 | 4.5 |
| 20 | Octane | 2.5 | 3 | 3 |
| 21 | Ignition | 3 | 4 | 3.5 |
| 22 | Catalyst | 2.5 | 2.5 | 2.5 |
| 23 | Kickoff | 3.5 | 3.75 | 3.25 |
| 24 | Signature | 3.5 | 3 | 3 |
| 25 | Xtra Tender 2472 | 3.25 | 2.75 | 2.75 |
| 26 | Anthem | 2.5 | 3 | 3.25 |
| 27 | Xtra Tender 274A | 3.5 | 3 | 3.5 |
| 28 | American Dream | 3.5 | 3.5 | 3.25 |
| 29 | Aces | 4 | 3.75 | 3.5 |
| 30 | Ap 358 | 3 | 3.5 | 3 |
| 31 | Cadence | 3.5 | 3 | 3 |
| Variety # | Variety Name | Tenderness | Sweetness | Flavor |
| 32 | Enchanted | 3.5 | 3.5 | 4 |
| 33 | Freedom | 4 | 3.25 | 3.25 |
| 34 | XTH 3674 | 3.5 | 3.75 | 3 |
| 35 | 7401 IMP | 3.5 | 3.75 | 3 |
| 36 | Glacial | 3.75 | 4 | 3.5 |
| 37 | Xtra Tender 1572 | 2.5 | 2..75 | 2 |
| 38 | SC 1336 | 3 | 3.5 | 3.5 |
| 39 | Sprinter XR | 3.5 | 3.5 | 3.25 |
| 40 | Platinum XR | 3 | 3.5 | 3 |
| 41 | Bullet XR | 3.5 | 2.5 | 2.5 |
| 42 | Takeoff | 4 | 4 | 4 |
| 43 | Nighthawk | 3.5 | 4 | 3.5 |

**Rating Scale for Table 4**

|  |  |  |  |
| --- | --- | --- | --- |
| **Rating Scale** | **1** | **3** | **5** |
| **Tenderness** | Tough | Average | Very tender |
| **Sweetness** | Starchy/bland | Average | Very sweet/sugary |
| **Flavor** | Poor | Good | Outstanding |

**\*All scores are reported as the rating of 5 ears from each variety.**

|  |  |  |
| --- | --- | --- |
| **Mike Gastier 2021 SH2 Sweet Corn Trial** | | |
| **Date** | **Project Leader** | **Description of Operation** |
| 10/7/2020 | Gastier | Disked and packed open area of field prepping for cover crop wheat planting |
| 10/9/2020 | Gastier | Drilled cover crop wheat behind trials into field with JD 7210 and 10' Great Plains no-till drill, variety was Kirby from Synergy Seeds, lot #ONV80XFS, Drill setting was 35, transmission range1, seeded approx 145 lbs / acre |
| 3/23/2021 | Gastier | Herbicide Application - 32 oz/A Roundup Powermax, 8 oz/A Choice Weathermaster and 9.6 oz/A Clasp |
| 4/5/2021 | Gastier | made out envelopes for trial 20 envelopes/ variety |
| 4/6/2021 | Gastier | Disk Chiseled plot area with JD6155M and Deutz Allis Disk Chisel Plow |
| 4/7/2021 | Gastier | Worked field with Landoll Finishol and JD6155M |
| 4/7/2021 | Gastier | Started packaging seed 51 seeds/ envelope 18 envelopes / variety |
| 4/11/2021 | Gastier | trial received .9 inches of rainfall |
| 4/12/2021 | Gastier | Finished packaging seed for trial |
| 4/12/2021 | Gastier | trial received .05 inches of rainfall |
| 4/15/2021 | Gastier | randomized seed for planting |
| 4/15/2021 | Gastier | trial received .01 inches of rainfall |
| 4/18/2021 | Gastier | trial received .01 inches of rainfall |
| 4/20/2021 | Gastier | trial received .2 inches of rainfall |
| 4/26/2021 | Gastier | set out drive flags on 40 foot spacing for broadcasting fertilizer |
| 4/26/2021 | Gastier | broadcast applied 250 lbs / acre 46-0-0, 100 lbs/ acre 10-52-0, 450 lbs / acre 0-0-60 and 10 lbs / acre of 10% granular Boron, used The Anderson fertilizer cart and JD 7210 tractor in application |
| 4/26/2021 | Gastier | Worked field with Landoll Finishol and JD6155Mto incorporate fertilizer |
| 4/28/2021 | Gastier | made out plot stakes for trial |
| 4/29/2021 | Gastier | trial received .7 inches of rainfall |
| 4/30/2021 | Gastier | trial received .65 inches of rainfall |
| 5/3/2021 | Gastier | trial received .5 inches of rainfall |
| 5/4/2021 | Gastier | trial received .05 inches of rainfall |
| 5/7/2021 | Gastier | trial received .2 inches of rainfall |
| 5/9/2021 | Gastier | trial received 1.6 inches of rainfall |
| 5/17/2021 | Gastier | Worked field with JD 6155M and Landoll finish-all and cultipacker in prep of planting trial |
| 5/17/2021 | Gastier | Planted trial with 4 row Almaco cone seeding unit on JD 7000 frame |
| 5/18/2021 | Gastier | Staked trail after planting to identify plots |
| 5/19/2021 | Gastier | Herbicide Application - 20oz/A Dual Magnum and 10.9 oz/A Clasp |
| 5/23/2021 | Gastier | trial received .7 inches of rainfall |
| 5/26/2021 | Gastier | trial received .6 inches of rainfall |
| 5/28/2021 | Gastier | trial received .8 inches of rainfall |
| 6/2/2021 | Gastier | trial received 1.2 inches of rainfall |
| 6/7/2021 | Gastier | side dressed trial with 35 gal or 375 lbs of 28% nitrogen or 105 units |
| 6/7/2021 | Gastier | trial received .35 inches of rainfall |
| 6/8/2021 | Gastier | trial received .2 inches of rainfall |
| 6/9/2021 | Gastier | trial received .05 inches of rainfall |
| 6/11/2021 | Gastier | cultivated trial with Kubota L3430 tractor and 2 row danishtine cultivator |
| 6/14/2021 | Gastier | Herbicide application - 1 pt/A Basagran, 1 pt/A Atrazine, 2pt/A Crop Oil and 3.6 oz/A Compadre ( .125%v/v) |
| 6/18/2021 | Gastier | trial received .2 inches of rainfall |
| 6/21/2021 | Gastier | trial received .4 inches of rainfall |
| 6/22/2021 | Gastier | trimmed back rows and set out plot stakes |
| 6/27/2021 | Gastier | trial received .8 inches of rainfall |
| 6/28/2021 | Gastier | trial received .05 inches of rainfall |
| 6/29/2021 | Gastier | trial received .7 inches of rainfall |
| 6/30/2021 | Gastier | trial received 1.5 inches of rainfall |
| 7/1/2021 | Gastier | trial received .45 inches of rainfall |
| 7/7/2021 | Gastier | trial received .4 inches of rainfall |
| 7/9/2021 | Gastier | Insecticide application - 1.92 oz/A Warrior II |
| 7/11/2021 | Gastier | trial received .55 inches of rainfall |
| 7/12/2021 | Gastier | trial received .3 inches of rainfall |
| 7/13/2021 | Gastier | trial received .3 inches of rainfall |
| 7/15/2021 | Gastier | trial received .1 inch of rainfall |
| 7/17/2021 | Gastier | trial received 3 inches of rainfall |
| 7/20/2021 | Gastier | put up electric fence around trial to exclude wildlife |
| 7/21/2021 | Gastier | Insecticide application - 5 oz/A Coragen and 22.8 oz/A Preference NIS (.25%v/v ) |
| 7/22/2021 | Gastier | made up 2 extra stakes in prep of harvest and set stakes out |
| 7/23/2021 | Gastier | Insecticide application - 1.5 pt/A Lannate LV and 6 oz/A Radiant |
| 7/25/2021 | Gastier | trial received .85 inches of rainfall |
| 7/27/2021 | Gastier | harvested and evaluated varieties, 22, 23, 39 |
| 7/27/2021 | Gastier | insecticide application - 2.8 oz/A Baythroid XL |
| 7/29/2021 | Gastier | trial received .1 inch of rainfall |
| 7/30/2021 | Gastier | harvested and evaluated varieties, 15, 25, 27, 33, 34, 37, 42, 43 |
| 7/30/2021 | Gastier | Insecticide application - 5 oz/A Coragen and 1.5 pt/A Lannate LV |
| 8/2/2021 | Gastier | harvested and evaluated varieties, 12, 14,16, 17, 19, 21, 24, 26, 29, 30, 31, 41 |
| 8/4/2021 | Gastier | harvested and evaluated varieties 2, 11, 13, 28, 32, 35 |
| 8/6/2021 | Gastier | harvested varieties 1, 4, 9, 18, 36, 38 for evaluation |
| 8/6/2021 | Gastier | graded and evaluated varieties 1, 4, 9, 18, 36, 38 |
| 8/6/2021 | Gastier | Insecticide application - 6 oz/A Radiant |
| 8/9/2021 | Gastier | harvested varieties 3, 5, 6, 40 for evaluation |
| 8/9/2021 | Gastier | graded and evaluated varieties 3,5,6,40 |
| 8/9/2021 | Gastier | trial received .5 inches of rainfall |
| 8/10/2021 | Gastier | harvested varieties 7, 8, 10, 20 for evaluation |
| 8/10/2021 | Gastier | graded and evaluated varieties 7, 8, 10 ,20 |
| 8/10/2021 | Gastier | trial received .6 inches of rainfall |
| 8/11/2021 | Gastier | trial received .2 inches of rainfall |
| 8/16/2021 | Gastier | trial received .15 inches of rainfall |
| 8/17/2021 | Gastier | Trial evaluation completed and released for crop destruct |
| 8/17/2021 | Gastier | Disked trial under with JD 6155M and IH 10 ft disk |
| 9/1/2021 | Gastier | Disked plot area with JD 7120 and IH 10 ft disk |
| 9/2/2021 | Gastier | Deep subsoiled plot with JD6155M and 3 shank Landoll ripper |
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