# Sunflower Planting Rate

**Trial ID: 2021-SFLP07 — R.M. of North Norfolk**

**Objective:** The purpose of this project is to quantify the agronomic and economic impacts of reducing and increasing normal planting rate in confection sunflowers.

| TRIAL INFORMATION | |
|---|---|
| **Location** | Bagot |
| **Previous Crop** | Soybeans |
| **Soil Texture** | Fine Loams |
| **Tillage** | Strip Till |
| **Planting Date** | May 14, 2021 |
| **Fertilizer (N-P-K-S)** | 161N 50P 150K |
| **Variety** | 6946 DMR |
| **Row Spacing** | 22” |
| **Planting Rate (seeds/ac)** | 13.5K, 16.5K & 19.5K |
| **Harvest Date** | October 12, 2021 |

| PLANT STAND @ V2 | | | |
|---|---|---|---|
| **Planting Rate (seeds/ac)** | 13,500 | 16,500 | 19,500 |
| **Plants/acre** | 10,500$^{A}$ | 11,000$^{AB}$ | 15,500$^{B}$ |

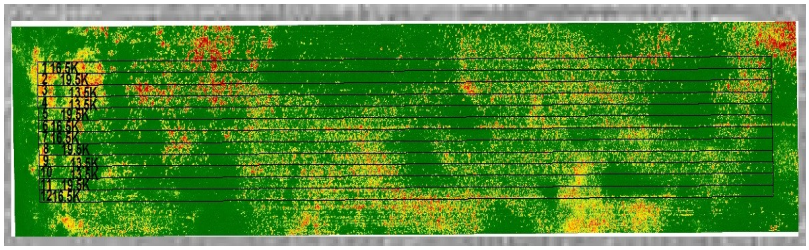
| PRECIPITATION† | | | | | |
|---|---|---|---|---|---|
| | **May** | **June** | **July** | **Aug** | **Total** |
| **Rainfall** | 52 | 69 | 5 | 97 | **222** |
| **Normal** | 50 | 76 | 64 | 78 | **268** |

†Growing season precipitation (mm) - May 01—Aug 31

| OVERALL YIELD | |
|---|---|
| | **Mean (lbs/ac)** |
| **13,500 plants/ac** | 2,768$^{B}$ |
| **16,500 plants/ac** | 2,796$^{B}$ |
| **19,500 plants/ac** | 3,058$^{A}$ |
| **P-Value** | 0.0405 |
| **CV** | 4.66% |
| **Significance** | **Yes** |

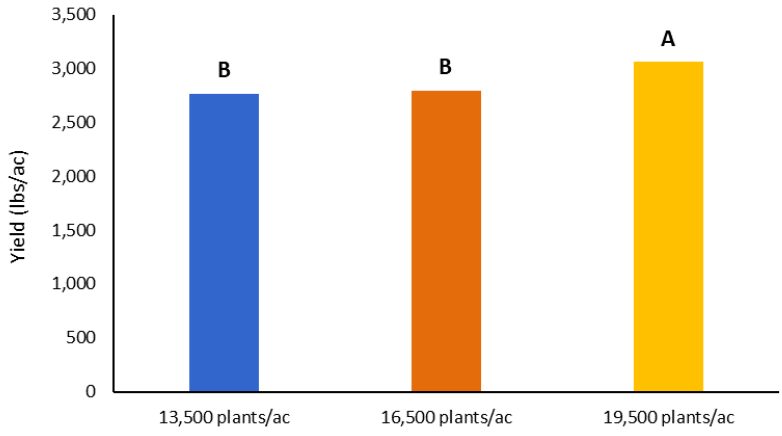
**Summary: There was a significant difference in yield of 250+ lbs/acre between the 19,500 seeds/ acre vs. the 13,500 and 16,500 seeds/acre planting rates. There was a significant difference in plant stands between the three planting rates. Rainfall was below average throughout the growing season.**

## FIELD IMAGE



| SUNFLOWER QUALITY | | | |
|---|---|---|---|
| | **13,500 plants/ac** | **16,500 plants/ac** | **19,500 plants/ac** |
| **% Dockage** | 9.0 | 5.0 | 4.6 |
| **% Moisture** | 11.5 | 12.4 | 10.8 |
| **TWT (lbs/bu)** | 26 | 26 | 26 |
| **Grade** | 1 | 1 | 1 |
| **Seed Sizing** | | | |
| **>24/64** | 13 | 30 | 10 |
| **>22/64** | 40 | 41 | 37 |
| **>20/64** | 35 | 19 | 36 |
| **<20/64** | 12 | 10 | 17 |

## YIELD BY TREATMENT

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