

**NDSU North Central Research Extension Center
2017 Field Pea Seed Singulation Trial at Minot**

| Variety | Seeding Rate | Harvest Stand | Days to Bloom | Days to Mature | Plant Height | Lodging | 1000 KWT | Test Weight | Seed Yield |
|----------|--------------|---------------|------------------|------------------|--------------|---------|----------|-------------|------------|
| | seeds/A | plants/A | DAP ¹ | DAP ¹ | inches | 0-9* | g | lbs/bu | lbs/A |
| Striker | 150k | 144,555 | 49 | 75 | 22 | 3 | 211 | 68.6 | 1508 |
| Striker | 200k | 125,195 | 49 | 74 | 21 | 2 | 206 | 67.8 | 1577 |
| Striker | 250k | 118,741 | 49 | 74 | 22 | 2 | 208 | 67.7 | 1853 |
| Striker | 300k | 122,613 | 49 | 74 | 20 | 2 | 210 | 67.7 | 1428 |
| Striker | 350k | 151,008 | 49 | 74 | 21 | 1 | 201 | 67.5 | 1885 |
| Treasure | 150k | 120,032 | 47 | 71 | 23 | 2 | 194 | 66.9 | 1746 |
| Treasure | 200k | 149,717 | 47 | 71 | 24 | 3 | 195 | 68.1 | 2270 |
| Treasure | 250k | 127,776 | 47 | 71 | 25 | 3 | 196 | 67.9 | 2351 |
| Treasure | 300k | 116,160 | 48 | 72 | 26 | 2 | 195 | 68.5 | 2038 |
| Treasure | 350k | 139,392 | 46 | 71 | 24 | 2 | 198 | 67.8 | 2516 |
| C.V.% | | 17.8 | 0.8 | 1.1 | 7.2 | 29.0 | 3.8 | 1.5 | 17.0 |
| LSD 0.05 | | NS | 1.0 | 1 | 3 | NS | 13 | NS | 560 |

Combined Means

| Seeding Rate | Harvest Stand | Days to Bloom | Days to Mature | Plant Height | Lodging | 1000 KWT | Test Weight | Seed Yield |
|--------------|---------------|------------------|------------------|--------------|---------|----------|-------------|------------|
| seeds/A | plants/A | DAP ¹ | DAP ¹ | inches | 0-9* | g | lbs/bu | lbs/A |
| 150k | 132,293 | 48 | 73 | 22 | 2 | 202 | 67.7 | 1627 |
| 200k | 137,456 | 48 | 72 | 22 | 3 | 200 | 67.9 | 1924 |
| 250k | 123,259 | 48 | 72 | 23 | 3 | 202 | 67.8 | 2102 |
| 300k | 119,387 | 49 | 73 | 23 | 2 | 202 | 68.1 | 1733 |
| 350k | 145,200 | 48 | 72 | 23 | 2 | 200 | 67.7 | 2200 |
| LSD 0.05 | NS | NS | NS | NS | NS | NS | NS | NS |

¹DAP = Days after planting.

*Lodging: 0 = none, 9 = lying flat on the ground.

NS = no statistical difference between seeding rates.

Planting Date: May 17

Harvest Date: August 1

Row Spacing: 15"

Previous Crop: Canola

Tillage System: Transitional No-till (2nd year)

Soil Type: Williams Loam

Note: The trial was grown under severe drought (3.6" of precip from January 1 - June 30).

Summary: The trial was planted with Great Plains no-till openers using Monosem seed singulation meters. The month of May was very dry and probably hindered germination and seedling establishment. The trial also sustained severe drought throughout the growing season which limited growth and yield. The harvested plant stand was inconsistent with seeding rates and had no correlation with seed yield. All seeding rates produced statistically similar agronomic and seed quality characteristics within each variety and as a combined group. Additional trials will need to be conducted in order to make firm conclusions on this technology.