

A1124-22

North Dakota Canola

Hybrid Trial Results for 2022 and Selection Guide

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Canola is a major oil crop in the northern Great Plains, particularly in North Dakota. In 2022, North Dakota accounted for approximately 81% of the 2.21 million canola acres planted in the U.S. This publication summarizes canola hybrid performance at the various North Dakota State University Research Extension Centers. The relative performance of the hybrids is presented in table form.

Give special attention to yield results of those trials nearest to your production area when evaluating varieties or hybrids in these trials. Also, attempt to view yield averages of several years rather than using only one year's data as a determining factor. In addition, consider other agronomic characteristics, such as maturity, lodging score and oil percentages, if available.

Research specialists and technicians helped with the field work and data compilation. The assistance given by many secretaries in entering data in respective portions of the document is very much appreciated. A special thank you goes to Lisa Johnson, Extension Plant Sciences secretary, for assisting in the compilation of this publication.

2022 Growing Season Update

Canola fieldwork began relatively late with 2% of the acres planted by May 8. On May 29, about 45% of the acres were planted, well behind the 81% average on the same date. On May 29, the topsoil moisture was rated at 61% adequate and 35% surplus. By July 3, 32% of the canola crop was flowering, compared with the average of 60% on the same day. Many parts of the state experienced a warm midsummer. By the last week in July 2022, the North Dakota office of the National Agricultural Statistics Service reported the canola crop condition as 2% poor, 30% fair, 63% good and 5% excellent. By Sept. 19, 68% of the canola acres were harvested. The 2022 season yield is estimated to be about 1,920 pounds per acre for North Dakota.

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Table 1. Canola Production, North Dakota 2008-2022.

| Year | Acres Planted | Acres Harvested | Yield Per Acre | Production |
|-------------------|--------------------------|-----------------|----------------|-------------|
| | ------(1,000 Acres)----- | | (lb.) | (1,000 lb.) |
| 2008 | 910 | 895 | 1,460 | 1,306,700 |
| 2009 | 730 | 725 | 1,840 | 1,334,000 |
| 2010 | 1,280 | 1,270 | 1,720 | 2,184,400 |
| 2011 | 890 | 850 | 1,500 | 1,275,000 |
| 2012 | 1,460 | 1,455 | 1,380 | 2,007,900 |
| 2013 | 920 | 915 | 1,820 | 1,665,300 |
| 2014 | 1,200 | 1,190 | 1,800 | 2,142,000 |
| 2015 | 1,410 | 1,400 | 1,780 | 2,492,000 |
| 2016 | 1,460 | 1,450 | 1,840 | 2,668,000 |
| 2017 | 1,590 | 1,560 | 1,600 | 2,496,000 |
| 2018 | 1,590 | 1,580 | 1,960 | 3,096,800 |
| 2019 | 1,700 | 1,610 | 1,800 | 2,898,000 |
| 2020 | 1,510 | 1,490 | 1,960 | 2,920,400 |
| 2021 | 1,750 | 1,720 | 1,340 | 2,304,800 |
| 2022 ¹ | 1,800 | 1,780 | 1,920 | 3,417,600 |
| Average | 1,314 | 1,293 | 1,683 | 2,169,893 |

¹Forecast U.S. Department of Agriculture (USDA).

Source: North Dakota Agricultural Statistics Service – USDA.

Table 2. April-September 2022 Average Temperature, Precipitation and Rankings for Selected North Dakota Locations.

| Location | Average Temperature (Ranking) | Total Precipitation (Ranking) |
|-----------------------------------|--|---|
| Bowman | 59.2 F (52nd warmest period since 1915) | 12.5 inches (49th wettest period since 1915) |
| Bismarck | 61.7 F (36th warmest period since 1875) | 12.7 inches (65th wettest period since 1875) |
| Cavalier | 56.8 F (21st coolest period since 1934) | 20.9 inches (8th wettest period since 1927) |
| Fargo | 60 F (68th coolest period since 1881) | 16.9 inches (58th wettest period since 1881) |
| Minot Exp. Station | 58.3 F (53rd warmest period since 1905) | 15.1 inches (30th wettest period since 1894) |
| Williston Exp. Station | 60 F (49th warmest period since 1894) | 11.7 inches (49th wettest period since 1894) |
| North Dakota Average ¹ | 58.7 F (58th warmest period since 1895) | 15.1 inches (38th wettest period since 1895) |

Source: Adnan Akyüz, NDSU, North Dakota state climatologist.

¹Statewide values are calculated based on all available locations in North Dakota rather than the mathematical average of the list above.

About This Publication

Variety trial data from all NDSU Research Extension Centers for all crops can be found at www.ag.ndsu.edu/varietytrials and the variety selection tool at <https://vt.ag.ndsu.edu/>. The agronomic data presented in this publication are from replicated research plots using experimental designs that enable the use of statistical analysis. The LSD (least significant difference) numbers beneath the columns in tables are derived from the statistical analyses and only apply to the numbers in the column in which they appear. If the difference between two varieties exceeds the LSD value, it means that with 95% or 90% probability (0.05 or 0.10 level), the higher-yielding variety has a significant yield advantage. If the difference between two varieties is less than the LSD value, then the variety yields are considered similar. The abbreviation NS is used to indicate “no significant difference” for that trait among any of the varieties. The CV is a measure of variability in the trial. The CV stands for coefficient of variation and is expressed as a percentage. Large CVs mean a large amount of variation that could not be attributed to differences in the varieties. In the tables, the mean indicates the average of the observations in the column. Only compare values within the table and look for trends for the desired trait among different experimental sites and years.

Oil and harvest yield were adjusted to 8.5% moisture. Oil content is intended to differentiate among hybrids at one location. LSD values should be used to determine differences among hybrids. **The oil content data are not intended to be compared between locations.**

Presentation of data for the varieties tested does not imply approval or endorsement by the authors or agencies conducting the tests. NDSU approves the reproduction of any table in this publication only if no portion is deleted, appropriate footnotes are given, the order of the data is not rearranged and NDSU is credited for the data.

Table 3. Company Name, Short Name Used in the Tables and URL With Company Information.

| Company/Brand | Short | URL |
|-------------------------|------------|--|
| BASF | BASF | agriculture.basf.us/crop-protection/products/seeds/invigor.html |
| Bayer/Dekalb | Dekalb | www.dekalbasgrowdeltapine.com/ |
| BrettYoung | BrettYoung | www.brettyoung.ca/agricultural-seed-crop-inputs-usa-portal/canola-usa/ |
| Cargill (Victory) | Cargill | www.cargill.com/agriculture/specialty-canola-growing-program |
| DuPont/Pioneer | Pioneer | www.pioneer.com/us |
| Dyna-Gro Seed | Dyna-Gro | www.dynagroseed.com |
| Integra Fortified Seed | Integra | www.wilburellisagribusiness.com/integra-seed/ |
| Meridian Seeds/Canterra | Canterra | www.meridianseeds.com/bulk-seed-for-sale/oil-seed/canola-seed/ |
| Nuseed SA | Nuseed | nuseed.com/us/crop/canola/ |
| Star Specialty | Star | www.starspecialtyseed.com |
| WinField/Croplan | Croplan | www.winfieldunited.com/products/winfield-united-seed/ |

Table 4. 2022 Summary of LibertyLink Canola Hybrids in North Dakota.

| Company/ Brand | Hybrid | Type ¹ | Blackleg Rating ² | Clubroot Resistance ³ | REC Carrington | REC Langdon | REC Minot | REC Williston | Irrigated Williston |
|-------------------|------------|-------------------|---------------------------------|-------------------------------------|-------------------|----------------|--------------|------------------|------------------------|
| BASF | L233P | LL | R | No | x | x | x | x | x |
| BASF | L340PC | LL | R | Yes | x | x | x | x | x |
| BASF | L343PC | LL | R | Yes | x | x | x | x | x |
| BASF | L345PC | LL | R | Yes | x | x | x | x | -- |
| BASF | L350PC | LL | R | Yes | -- | x | x | -- | -- |
| BASF | LR344PC | LLTF | R | Yes | x | x | x | x | x |
| BASF | LR354PC | LL/RR | R | Yes | -- | x | x | -- | -- |
| Canterra | CS4000 LL | LL | R | Yes | -- | x | x | x | -- |
| Croplan | CP7130LL | LL | R | No | x | x | x | x | x |
| Croplan | CP7144LL | LL | R | No | x | x | x | x | x |
| Dekalb | DKLL82SC | LL | R | No | x | x | x | -- | -- |
| Dekalb | DKLL83SC | LL | R | No | x | x | x | -- | -- |
| Dekalb | DKTFLL21SC | LLTF | R | No | x | x | x | x | -- |
| Dyna-Gro | DG660LCM | LL | R | Yes | -- | -- | x | -- | -- |
| Pioneer | P505MSL | LL | R | Yes | x | x | -- | -- | -- |

¹LL = LibertyLink, RR = Roundup Ready and TF = Roundup Ready TruFlex.²Blackleg rating provided by company, R = Resistant.³Hybrid Clubroot resistance rating provided by company.

Table 5. 2022 Summary of Roundup Ready Canola Hybrids in North Dakota.

| Company/ Brand | Hybrid | Type ¹ | Blackleg Rating ² | Clubroot Resistance ³ | REC Carrington | REC Langdon | REC Minot | Irrigated Williston |
|-------------------|-------------|-------------------|---------------------------------|-------------------------------------|-------------------|----------------|--------------|------------------------|
| BASF | LR344PC | TFLL | R | Yes | -- | x | -- | -- |
| BrettYoung | BY 6211TF | TF | R | No | x | x | x | x |
| BrettYoung | BY 6217TF | TF | R | Yes | -- | -- | x | -- |
| Canterra | CS2600 CR-T | TF | R | Yes | -- | x | x | -- |
| Canterra | CS3000 TF | TF | R | Yes | -- | x | x | -- |
| Canterra | CS3100 TF | TF | R | Yes | -- | x | -- | -- |
| Cargill | H4389 | TF | R | Yes | x | -- | -- | -- |
| Cargill | H5280 | TF | R | Yes | x | -- | -- | -- |
| Cargill | V25-3T | TF | R | Yes | -- | x | x | -- |
| Cargill | V25-5T | TF | R | Yes | -- | x | x | -- |
| Croplan | CP9978TF | TF | R | No | x | x | x | x |
| Dekalb | DKTF99SC | TF | R | No | x | -- | x | -- |
| Dekalb | DKTFLL21SC | TFLL | R | No | x | x | x | -- |
| Dyna-Gro | DG 760TM | TF | R | No | -- | -- | x | -- |
| Integra | 7361RC | TF | R | Yes | x | x | x | -- |
| Nuseed | NC155 TF | TF | R | No | x | x | x | x |
| Nuseed | NC471 TF | TF | R | No | x | x | x | x |
| Nuseed | NC527CR TF | TF | R | Yes | x | x | x | x |
| Pioneer | 45M35 | RR | MR | No | x | x | -- | -- |
| Star | StarFlex | TF | R | No | -- | x | x | x |

¹Hybrids are traditional oil type, RR = Roundup Ready, TF = Roundup Ready TruFlex and LL = LibertyLink.

²Blackleg rating provided by company, R = Resistant.

³Hybrid Clubroot resistance rating provided by company.

Table 6. 2022 Canola - Roundup Ready - Carrington - Author, M. Ostlie.

| Company/ Brand | Hybrid | Days to Flower (DAP) ² | Flower Duration (days) | Days to Maturity (DAP) ² | Plant Height (inch) | Plant Lodge ¹ (0-9) | 1,000 Seed Weight (gram) | Oil Content (%) | Seed Yield 2022 (lb/a) |
|-------------------|------------|---|------------------------------|---|---------------------------|--------------------------------------|--------------------------------|-----------------------|------------------------------|
| BrettYoung | BY 6211TF | 42 | 15 | 81 | 37 | 1.3 | 2.7 | 43.0 | 1,897 |
| Cargill | H4389 | 47 | 13 | 86 | 37 | 1.7 | 2.7 | 43.1 | 1,558 |
| Cargill | H5280 | 47 | 13 | 87 | 43 | 0.7 | 2.8 | 46.0 | 1,855 |
| Cargill | V25-3T | 45 | 13 | 83 | 36 | 1.3 | 2.7 | 43.1 | 1,820 |
| Cargill | V25-5T | 47 | 13 | 87 | 44 | 1.7 | 2.6 | 43.7 | 1,734 |
| Croplan | CP9978TF | 42 | 15 | 83 | 36 | 4.0 | 2.8 | 43.6 | 1,594 |
| Dekalb | DKTF99SC | 41 | 16 | 81 | 35 | 2.3 | 2.7 | 41.7 | 2,155 |
| Dekalb | DKTFLL21SC | 39 | 16 | 80 | 30 | 3.3 | 2.6 | 42.9 | 1,720 |
| Integra | 7361RC | 44 | 14 | 85 | 40 | 2.7 | 3.0 | 44.3 | 1,764 |
| Nuseed | NC155 TF | 41 | 15 | 82 | 35 | 1.7 | 2.5 | 41.4 | 1,742 |
| Nuseed | NC471 TF | 44 | 14 | 86 | 38 | 2.7 | 2.4 | 42.6 | 1,603 |
| Nuseed | NC527CR TF | 43 | 15 | 82 | 33 | 1.3 | 2.6 | 43.4 | 1,768 |
| Pioneer | 45M35 | 42 | 15 | 80 | 36 | 1.3 | 2.5 | 44.2 | 2,044 |
| Mean | | 43 | 14 | 83 | 37 | 2.0 | 2.7 | 43.3 | 1,789 |
| CV % | | 2.1 | 7.3 | 1.8 | 13.6 | 46 | 6.3 | 3.4 | 8.6 |
| LSD 0.05 | | 1.5 | 1.8 | 2.5 | 8.4 | 1.5 | 0.3 | 2.5 | 258 |
| LSD 0.10 | | 1.3 | 1.5 | 2.1 | 7.0 | 1.3 | 0.2 | 2.1 | 214 |

Trial was planted on May 18 and harvested on Aug. 17. Previous crop was soybean.

¹Lodging: 0 = none, 9 = lying flat on the ground.

²DAP = Days after planting.

Table 7. 2022 Canola - LibertyLink - Carrington - Author, M. Ostlie.

| Brand | Hybrid | Days to Flower (DAP) ² | Flower Duration (days) | Days to Maturity (DAP) ² | Plant Height (inch) | Plant Lodge ¹ (0-9) | 1,000 Seed Weight (gram) | Oil Content (%) | Seed Yield 2022 (lb/a) |
|----------|------------|---|------------------------------|---|---------------------------|--------------------------------------|--------------------------------|-----------------------|------------------------------|
| BASF | L233P | 43 | 15 | 85 | 43 | 3.0 | 2.6 | 44.0 | 2,122 |
| BASF | L340PC | 41 | 16 | 86 | 41 | 2.5 | 2.9 | 43.2 | 2,921 |
| BASF | L343PC | 42 | 14 | 88 | 43 | 2.0 | 2.8 | 44.0 | 2,928 |
| BASF | L345PC | 43 | 16 | 89 | 42 | 3.0 | 2.8 | 44.5 | 2,862 |
| BASF | LR344PC | 44 | 14 | 88 | 41 | 3.3 | 2.6 | 44.1 | 2,302 |
| Croplan | CP7130LL | 43 | 15 | 84 | 47 | 2.0 | 2.5 | 42.9 | 2,074 |
| Croplan | CP7144LL | 42 | 15 | 86 | 44 | 2.3 | 3.1 | 45.2 | 2,123 |
| Dekalb | DKLL82SC | 41 | 16 | 83 | 39 | 3.0 | 2.6 | 45.0 | 2,145 |
| Dekalb | DKLL83SC | 39 | 16 | 81 | 38 | 3.5 | 2.7 | 43.9 | 2,169 |
| Dekalb | DKTFLL21SC | 40 | 16 | 80 | 39 | 4.0 | 2.6 | 43.9 | 1,907 |
| Pioneer | P505MSL | 42 | 15 | 85 | 44 | 3.3 | 2.9 | 43.1 | 2,505 |
| Mean | | 42 | 15 | 85 | 42 | 2.9 | 2.7 | 44.0 | 2,369 |
| CV % | | 1.3 | 4.9 | 1.7 | 9.0 | 28 | 4.7 | 1.3 | 9.6 |
| LSD 0.05 | | 0.8 | 1.1 | 2.1 | 5.4 | 1.2 | 0.2 | 0.8 | 327 |
| LSD 0.10 | | 0.7 | 0.9 | 1.7 | 4.5 | 1.0 | 0.2 | 0.7 | 272 |

Trial was planted on May 18 and harvested on Aug. 17. Previous crop was soybean.

¹Lodging: 0 = none, 9 = lying flat on the ground.

²DAP = Days after planting.

Table 8. 2022 Canola - Roundup Ready - Langdon - Authors, B. Hanson, L. Henry and R. Duerr.

| Company/ Brand | Hybrid | Days to | Flower | Days to | Plant | Cover ¹ | Plant | Oil | Seed Yield | |
|-------------------|-------------|--------------------|----------|--------------------|--------|--------------------|--------------------|---------|--------------------|------------------------|
| | | Flower | Duration | Maturity | Height | | Lodge ² | Content | 2022 | 2-yr Avg. ³ |
| | | (DAP) ⁴ | (days) | (DAP) ⁴ | (inch) | (%) | (0-9) | (%) | ----- (lb/a) ----- | |
| BASF | LR344PC | 41 | 21 | 94 | 45 | 99 | 3 | 41.5 | 2,954 | -- |
| BrettYoung | BY 6211TF | 39 | 21 | 91 | 45 | 99 | 3 | 40.6 | 3,295 | -- |
| Canterra | CS2600 CR-T | 38 | 19 | 88 | 46 | 99 | 4 | 41.5 | 2,409 | 2,867 |
| Canterra | CS3000 TF | 37 | 20 | 90 | 45 | 98 | 4 | 41.5 | 2,929 | -- |
| Canterra | CS3100 TF | 44 | 20 | 97 | 48 | 98 | 2 | 42.2 | 3,382 | -- |
| Cargill | V25-3T | 43 | 21 | 94 | 51 | 100 | 0 | 41.9 | 3,072 | -- |
| Cargill | V25-5T | 45 | 18 | 96 | 55 | 100 | 0 | 43.3 | 3,675 | -- |
| Croplan | CP9978TF | 39 | 20 | 92 | 45 | 98 | 4 | 41.7 | 2,710 | 3,127 |
| Dekalb | DKTFLL21SC | 38 | 21 | 89 | 45 | 99 | 3 | 40.9 | 3,148 | -- |
| Integra | 7361RC | 40 | 20 | 91 | 45 | 97 | 4 | 40.9 | 2,657 | 2,953 |
| Nuseed | NC155 TF | 38 | 24 | 91 | 49 | 100 | 2 | 41.6 | 2,963 | -- |
| Nuseed | NC471 TF | 40 | 20 | 92 | 47 | 100 | 2 | 42.3 | 2,360 | -- |
| Nuseed | NC527CR TF | 39 | 22 | 92 | 48 | 99 | 3 | 42.0 | 2,797 | -- |
| Pioneer | 45M35 | 41 | 21 | 92 | 48 | 99 | 2 | 44.1 | 3,511 | -- |
| Star | StarFlex | 40 | 21 | 93 | 45 | 97 | 2 | 41.8 | 3,149 | 3,113 |
| Mean | | 40 | 21 | 92 | 47 | 99 | 3 | 41.9 | 3,001 | 3,015 |
| CV % | | 1.4 | 4.7 | 1.4 | 5.9 | 1.7 | 15.1 | 1.0 | 7.1 | -- |
| LSD 0.05 | | 0.8 | 1.4 | 1.8 | 4.1 | 2.5 | 0.3 | 0.6 | 204 | -- |
| LSD 0.10 | | 0.7 | 1.1 | 1.5 | 3.4 | 2.0 | 0.3 | 0.5 | 170 | -- |

Trial was planted on June 3 and harvested on Sept. 22. Previous crop: soybean.

¹Cover - visual rating of percent area of plot covered by plant growth. This is a measure of stand and vigor.

Plants were at 5- to 6-leaf stage.

²Lodging: 0 = none, 9 = lying flat on the ground.

³Average of 2020 and 2022 data.

⁴DAP = Days after planting.

Table 9. 2022 Canola - Irrigated - Williston - Authors, J. Jacobs, A. Turnquist and T. Tjelde.

| Company/ Brand | Hybrid | Type ¹ | Days to | Flower | Days to | Plant | Test | Seed Yield | |
|-------------------|------------|-------------------|--------------------|----------|--------------------|--------------------|---------|--------------------|-----------|
| | | | Flower | Duration | Maturity | Lodge | Weight | 2022 | 2-yr Avg. |
| | | | (DAP) ² | (days) | (DAP) ² | (0-9) ³ | (lb/bu) | ----- (lb/a) ----- | |
| BrettYoung | BY 6211TF | TF | 42 | 15 | 89 | 1.3 | 53.1 | 3,105 | 3,180 |
| Croplan | CP9978TF | TF | 42 | 14 | 91 | 2.0 | 53.1 | 2,411 | 2,770 |
| Nuseed | NC155 TF | TF | 41 | 17 | 92 | 2.0 | 53.6 | 2,313 | -- |
| Nuseed | NC471 TF | TF | 42 | 16 | 90 | 3.0 | 53.0 | 1,530 | 2,123 |
| Nuseed | NC527CR TF | TF | 42 | 14 | 90 | 1.3 | 52.8 | 2,441 | 2,573 |
| Star | StarFlex | TF | 43 | 15 | 91 | 2.7 | 52.8 | 2,969 | 2,653 |
| BASF | L233P | LL | 46 | 11 | 91 | 1.7 | 52.6 | 2,882 | - |
| BASF | L340PC | LL | 44 | 15 | 90 | 1.7 | 52.0 | 3,133 | - |
| BASF | L343PC | LL | 46 | 14 | 91 | 1.3 | 51.0 | 2,942 | - |
| BASF | LR344PC | LLTF | 46 | 11 | 91 | 2.3 | 52.5 | 2,690 | - |
| Croplan | CP7130LL | LL | 46 | 10 | 89 | 2.3 | 52.9 | 2,012 | 2,613 |
| Croplan | CP7144LL | LL | 46 | 10 | 91 | 2.0 | 52.8 | 2,531 | 2,703 |
| Mean | | | 44 | 14 | 91 | 2.0 | 52.7 | 2,580 | 2,659 |
| CV % | | | -- | -- | -- | -- | 0.6 | 9.1 | -- |
| LSD 0.05 | | | -- | -- | -- | -- | 0.5 | 398 | -- |
| LSD 0.10 | | | -- | -- | -- | -- | 0.4 | 330 | -- |

Trial was planted on May 23 and harvested on Sept 7. Previous crop: dry bean.

¹TF = Roundup Ready TruFlex and LL = LibertyLink.

²DAP = Days after planting.

³Lodging: 0 = none, 9 = lying flat on the ground.

Table 10. 2022 Canola - LibertyLink - Langdon - Authors, B. Hanson, L. Henry and R. Duerr.

| Company/ Brand | | Hybrid | Type ¹ | Days to Flower | Flower Duration | Days to Maturity | Plant Height | Cover ² | Plant Lodge ³ | Oil Content | Seed Yield | |
|-------------------|------------|--------|-------------------|--------------------|--------------------|---------------------|-----------------|--------------------|-----------------------------|----------------|--------------------|------------------------|
| | | | | (DAP) ⁵ | (days) | (DAP) ⁵ | (inch) | (%) | (0-9) | (%) | 2022 | 2-yr Avg. ⁴ |
| | | | | | | | | | | | ----- (lb/a) ----- | |
| BASF | L233P | LL | | 41 | 20 | 93 | 48 | 98 | 4.5 | 42.7 | 3,171 | 3,368 |
| BASF | L340PC | LL | | 40 | 20 | 91 | 47 | 100 | 4.2 | 41.4 | 3,573 | 3,493 |
| BASF | L343PC | LL | | 40 | 19 | 92 | 47 | 98 | 3.8 | 41.6 | 3,627 | -- |
| BASF | L345PC | LL | | 41 | 20 | 93 | 47 | 99 | 4.1 | 41.8 | 3,734 | 3,435 |
| BASF | L350PC | LL | | 45 | 19 | 98 | 51 | 99 | 1.7 | 45.2 | 3,615 | -- |
| BASF | LR344PC | LL/RR | | 42 | 21 | 94 | 46 | 99 | 5.5 | 42.1 | 3,227 | 3,123 |
| BASF | LR354PC | LL/RR | | 47 | 17 | 98 | 56 | 96 | 1.1 | 44.1 | 3,351 | -- |
| Canterra | CS4000 LL | LL | | 40 | 20 | 93 | 50 | 101 | 4.0 | 42.9 | 3,237 | 3,279 |
| Croplan | CP7130LL | LL | | 41 | 21 | 92 | 52 | 99 | 4.2 | 42.7 | 3,228 | -- |
| Croplan | CP7144LL | LL | | 40 | 20 | 92 | 48 | 99 | 2.7 | 42.9 | 3,178 | -- |
| Dekalb | DKLL82SC | LL | | 38 | 21 | 88 | 45 | 100 | 5.0 | 41.4 | 3,094 | 3,132 |
| Dekalb | DKLL83SC | LL | | 38 | 19 | 88 | 49 | 97 | 3.9 | 43.5 | 3,182 | -- |
| Dekalb | DKTFLL21SC | LLTF | | 37 | 21 | 87 | 46 | 95 | 2.9 | 43.2 | 2,793 | 3,060 |
| Pioneer | P505MSL | LL | | 40 | 19 | 92 | 53 | 99 | 5.8 | 41.9 | 2,647 | -- |
| Mean | | | | 41 | 20 | 92 | 49 | 99 | 3.8 | 42.7 | 3,261 | 3,206 |
| CV % | | | | 1.9 | 5.0 | 1.1 | 5.5 | 1.8 | 12.9 | 1.2 | 3.9 | -- |
| LSD 0.05 | | | | 1.1 | 1.4 | 1.4 | 3.9 | 2.5 | 0.5 | 0.7 | 122 | -- |
| LSD 0.10 | | | | 0.9 | 1.2 | 1.2 | 3.2 | 2.0 | 0.4 | 0.6 | 102 | -- |

Trial was planted on June 3 and harvested on Sept. 22. Previous crop: soybean.

¹LL = LibertyLink, RR = Roundup Ready, and TF = Roundup Ready TruFlex.

²Cover - visual rating of percent area of plot covered by plant growth. This is a measure of stand and vigor. Plants were at 5- to 6-leaf stage.

³Lodging: 0 = none, 9 = lying flat on the ground.

⁴Average of 2020 and 2022 data.

⁵DAP = Days after planting.

Table 11. 2022 Canola - Liberty Link - Williston - Author, G. Pradhan.

| Company/ Brand | | Hybrid | Days to Flower | Days to Maturity | Plant Height | Test Weight | Seed Yield 2022 |
|-------------------|------------|--------|--------------------|---------------------|-----------------|----------------|--------------------|
| | | | (DAP) ¹ | (DAP) ¹ | (inch) | (lb/bu) | (lb/a) |
| BASF | L233P | | 43 | 80 | 33 | 52.4 | 472 |
| BASF | L340PC | | 42 | 79 | 35 | 52.8 | 544 |
| BASF | L343PC | | 43 | 83 | 33 | 51.7 | 490 |
| BASF | L345PC | | 43 | 84 | 33 | 52.4 | 539 |
| BASF | LR344PC | | 43 | 85 | 34 | 51.8 | 469 |
| Canterra | CS4000 LL | | 45 | 82 | 33 | 51.7 | 199 |
| Croplan | CP7130LL | | 43 | 79 | 34 | 52.2 | 204 |
| Croplan | CP7144LL | | 42 | 79 | 33 | 51.4 | 237 |
| Dekalb | DKTFLL21SC | | 46 | 81 | 31 | 52.4 | 385 |
| Mean | | | 43 | 81 | 33 | 52.1 | 393 |
| CV % | | | 10.9 | 1.8 | 7.7 | 0.7 | 14.0 |
| LSD 0.05 | | | 6.9 | 2.2 | 3.8 | 0.5 | 81 |
| LSD 0.10 | | | 5.7 | 1.8 | 3.1 | 0.4 | 67 |

Trial was planted on May 24 and harvested on Aug. 26. Previous crop: soybean.

¹DAP = Days after planting.

Table 12. 2022 Canola - LibertyLink - Minot - Authors, E. Eriksmoen, A. Kraklau and J. Hansen.

| Company/ Brand | Hybrid | Days to Flower (DAP) ¹ | Flower Duration (days) | Days to Maturity (DAP) ¹ | Plant Height (inch) | Oil Content (%) | Yield 2022 (lb/a) |
|-------------------|------------|---|------------------------------|---|---------------------------|-----------------------|-------------------------|
| BASF | L233P | 41 | 25 | 85 | 31 | 41.8 | 2,294 |
| BASF | L340PC | 41 | 25 | 84 | 37 | 41.1 | 2,251 |
| BASF | L343PC | 41 | 25 | 86 | 31 | 41.5 | 2,165 |
| BASF | L345PC | 41 | 25 | 83 | 39 | 41.0 | 2,171 |
| BASF | L350PC | 42 | 21 | 86 | 39 | 42.4 | 1,953 |
| BASF | LR344PC | 42 | 24 | 84 | 34 | 41.6 | 2,270 |
| BASF | LR354PC | 40 | 24 | 86 | 33 | 41.5 | 1,888 |
| Canterra | CS4000 LL | 39 | 26 | 84 | 30 | 41.0 | 1,961 |
| Croplan | CP7130LL | 40 | 26 | 83 | 39 | 41.4 | 2,091 |
| Croplan | CP7144LL | 40 | 24 | 80 | 31 | 41.5 | 1,869 |
| Dekalb | DKLL82SC | 39 | 26 | 86 | 35 | 40.2 | 1,778 |
| Dekalb | DKLL83SC | 43 | 23 | 82 | 35 | 41.7 | 1,742 |
| Dekalb | DKTFLL21SC | 39 | 26 | 86 | 33 | 40.3 | 1,879 |
| Dyna-Gro | DG660LCM | 41 | 24 | 84 | 36 | 41.2 | 1,879 |
| Mean | | 41 | 25 | 84 | 35 | 41.3 | 2,014 |
| CV % | | 1.7 | 7.1 | 1.0 | 10.9 | 2.0 | 5.7 |
| LSD 0.05 | | 1.0 | NS | 1.0 | 6.0 | NS | 188 |
| LSD 0.10 | | 1.0 | 2.0 | 1.0 | 5.0 | 1.1 | 156 |

Trial was planted on May 25 and harvested on Sept. 6. Previous crop: soybean.

¹DAP = Days after planting.

Table 13. 2022 Canola - Roundup Ready - Minot - Authors, E. Eriksmoen, A. Kraklau and J. Hansen.

| Company/ Brand | Hybrid | Days to Flower (DAP) ¹ | Flower Duration (days) | Days to Maturity (DAP) ¹ | Plant Height (inch) | Oil Content (%) | Yield 2022 (lb/a) |
|-------------------|-------------|---|------------------------------|---|---------------------------|-----------------------|-------------------------|
| BrettYoung | BY 6211TF | 41 | 25 | 85 | 34 | 40.1 | 1,867 |
| BrettYoung | BY 6217TF | 43 | 24 | 85 | 40 | 42.8 | 2,153 |
| Canterra | CS2600 CR-T | 41 | 25 | 83 | 32 | 41.3 | 1,786 |
| Canterra | CS3000 TF | 38 | 27 | 86 | 29 | 40.8 | 2,092 |
| Cargill | V25-3T | 41 | 26 | 83 | 37 | 41.3 | 1,920 |
| Cargill | V25-5T | 43 | 25 | 86 | 43 | 41.4 | 2,105 |
| Croplan | CP9978TF | 41 | 24 | 85 | 33 | 40.9 | 1,724 |
| Dekalb | DKTF99SC | 42 | 25 | 86 | 31 | 40.5 | 2,379 |
| Dekalb | DKTFLL21SC | 40 | 28 | 87 | 31 | 41.6 | 1,894 |
| Dyna-Gro | DG760TM | 40 | 26 | 86 | 33 | 41.7 | 2,050 |
| Dyna-Gro | DG781TCM | 40 | 24 | 85 | 34 | 41.6 | 2,451 |
| Integra | 7361RC | 42 | 23 | 85 | 32 | 40.7 | 1,932 |
| Nuseed | NC155 TF | 39 | 29 | 86 | 38 | 40.5 | 2,222 |
| Nuseed | NC471 TF | 41 | 24 | 85 | 35 | 40.6 | 1,790 |
| Nuseed | NC527CR TF | 40 | 24 | 82 | 34 | 42.9 | 2,070 |
| Star | StarFlex | 41 | 25 | 84 | 32 | 41.0 | 1,742 |
| Mean | | 41 | 25 | 85 | 34 | 41.2 | 2,011 |
| CV % | | 3.7 | 6.7 | 2.2 | 8.2 | 1.9 | 6.9 |
| LSD 0.05 | | 3.0 | 3.0 | 3.0 | 5.0 | 1.3 | 228 |
| LSD 0.10 | | 2.0 | 2.0 | 3.0 | 4.0 | 1.1 | 189 |

Trial was planted on May 25 and harvested on Sept. 6. Previous crop: soybean.

¹DAP = Days after planting.

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