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North Dakota Flax

Variety Trial Results for 2019 and Selection Guide

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This selection guide summarizes flax variety performance at the various North Dakota State University Research Extension Centers. Give special attention to flax yield results of those trials nearest to your production area when evaluating varieties 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, disease tolerance, lodging score and oil percentages, if available.

The agronomic data presented 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 (LSD 0.05 or 0.10), 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 content and harvested seed yield were adjusted to 9% moisture. **The oil content data are not intended to be compared between locations.** In the table headings (Tables 4 to 10), the lead scientists are acknowledged. 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. Research specialists and technicians helped with the field work and data compilation.

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Table 1. Selected Flax Variety Descriptions Tested in 2019 in North Dakota.

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Table 1. Selected Flax Variety Descriptions Tested in 2019 in North Dakota.

| Variety ¹ | Origin ² | Year Released | Days to Flower Avg. ³ | Seed Color | Plant Height | Plant Height | | Fusarium Wilt ⁴ |
|----------------------|---------------------|---------------|----------------------------------|------------|--------------|--------------|-------------------|----------------------------|
| | | | | | | inch | Avg. ³ | |
| AAC Bright | Can. | 2017 | 53 | Yellow | Med.tall | 23 | | MR |
| Bison | ND | 1926 | 52 | Brown | Med.tall | 23 | | MR |
| Carter | ND | 2004 | 53 | Yellow | Med.tall | 23 | | MS/MR |
| CDC Buryu | Can. | 2016 | 52 | Brown | Med. | 22 | | MR |
| CDC Glas | Can. | 2012 | 54 | Brown | Med.tall | 23 | | MR |
| CDC Melyn | Can. | 2016 | 55 | Yellow | Med. | 22 | | MR |
| CDC Neela | Can. | 2013 | 53 | Brown | Med. | 22 | | MR |
| CDC Plava | Can. | 2015 | 53 | Brown | Med. | 21 | | MR |
| Gold ND | ND | 2014 | 53 | Yellow | Tall | 24 | | MR/R |
| ND Hammond | ND | 2018 | 53 | Brown | Med.tall | 23 | | MS |
| Omega | ND | 1989 | 54 | Yellow | Med. | 22 | | MS/MR |
| Prairie Thunder | Can. | 2006 | 53 | Brown | Tall | 23 | | MR |
| Webster | SD | 1998 | 53 | Brown | Tall | 24 | | MR |
| York | ND | 2002 | 52 | Brown | Med.tall | 23 | | MR/R |

¹ All varieties have resistance to prevalent races of rust; all have good oil yield and oil quality.

² Can. = Canada; ND = North Dakota State University; SD = South Dakota State University.

³ Average of three locations: Carrington, Langdon, Minot in 2019.

⁴ R = resistant; MR = moderately resistant; MS = moderately susceptible.

Table 2. Yield of Flax Varieties at Five Locations in North Dakota, 2017-2019.

| Variety | <u>Carrington</u> | | <u>Langdon</u> | | <u>Dickinson</u> | | <u>Minot</u> | | <u>Williston</u> <u>dryland</u> | | <u>Average N.D.</u> | |
|-------------------------|-------------------|------------|----------------|------------|------------------|------------|--------------|------------|------------------------------------|------------|---------------------|------------|
| | 2019 | 3 Yr. Avg. | 2019 | 3 Yr. Avg. | 2019 | 3 Yr. Avg. | 2019 | 3 Yr. Avg. | 2019 | 3 Yr. Avg. | 2019 | 3 Yr. Avg. |
| | ---(bu/a)--- | | ---(bu/a)--- | | ---(bu/a)--- | | ---(bu/a)--- | | ---(bu/a)--- | | ---(bu/a)--- | |
| AAC Bright ¹ | 32.2 | -- | 38.0 | -- | 13.6 | -- | 21.5 | -- | 26.3 | -- | | |
| Bison | 27.2 | -- | 40.1 | 43.0 | 16.2 | 18.5 | 12.6 | 13.5 | 24.0 | -- | | |
| Carter ¹ | 32.7 | 28.7 | 42.3 | 42.5 | 14.7 | 17.7 | 13.9 | 13.3 | 25.9 | 25.5 | | |
| CDC Buryu | 20.2 | -- | 41.6 | -- | 15.4 | -- | 26.8 | -- | 26.0 | -- | | |
| CDC Glas | 35.1 | -- | 41.6 | 46.2 | 13.3 | 20.2 | 21.4 | 16.4 | 27.8 | -- | | |
| CDC Melyn ¹ | 22.3 | -- | 34.5 | -- | 12.1 | -- | 15.3 | -- | 21.1 | -- | | |
| CDC Neela | 31.6 | 31.4 | 43.2 | 42.3 | 13.9 | 22.5 | 16.3 | 15.0 | 26.2 | 27.8 | | |
| CDC Plava | 23.5 | -- | 39.7 | -- | 9.9 | -- | 28.8 | -- | 25.5 | -- | | |
| Gold ND ¹ | 21.3 | 27.6 | 41.2 | 45.4 | 14.1 | 17.4 | 14.0 | 13.6 | 22.6 | 26.0 | | |
| ND Hammond | 28.6 | 31.8 | 38.4 | 42.1 | 11.0 | 17.5 | 15.9 | -- | 23.5 | -- | | |
| Omega ¹ | 19.1 | 25.7 | 38.5 | 40.9 | 13.3 | 16.6 | 21.8 | 17.4 | 23.2 | 25.1 | | |
| Prairie Thunder | 24.4 | 31.1 | 42.6 | 46.3 | 15.9 | 18.2 | 19.3 | 14.0 | 25.5 | 27.4 | | |
| Webster | 22.7 | 30.6 | 42.0 | 45.9 | 13.9 | 16.9 | 13.2 | 12.2 | 23.0 | 26.4 | | |
| York | 29.5 | 32.4 | 43.2 | 45.0 | 18.4 | 17.2 | 16.2 | 14.6 | 26.8 | 27.3 | | |
| Mean | 26.5 | 29.9 | 40.5 | 44.0 | 14.0 | 18.3 | 18.3 | 14.4 | 24.8 | 26.5 | | |
| CV % | 17.0 | -- | 5.8 | -- | 15.0 | -- | 21.4 | -- | 16.2 | 7.8 | | |
| LSD 0.05 | 6.6 | -- | 3.9 | -- | 3.6 | -- | 5.2 | -- | NS | NS | | |
| LSD 0.10 | 5.5 | -- | 3.2 | -- | 3.0 | -- | 4.4 | -- | NS | NS | | |

¹Yellow seeded.

Table 3. Test Weight and Oil Content of Flax Varieties at Five Locations in North Dakota, 2019.

| Variety | <u>Carrington</u> | | <u>Langdon</u> | | <u>Minot</u> | | <u>Dickinson</u> | | <u>Williston dryland</u> | | <u>Average N.D.²</u> | |
|-------------------------|-------------------|------|----------------|----------|--------------|----------|------------------|----------|--------------------------|----------|---------------------------------|-----|
| | Test Wt. | Oil | Test Wt. | Test Wt. | Oil | Test Wt. | Oil | Test Wt. | Oil | Test Wt. | Oil | |
| | (lb/bu) | (%) | (lb/bu) | (lb/bu) | (%) | (lb/bu) | (%) | (lb/bu) | (%) | (lb/bu) | (%) | (%) |
| AAC Bright ¹ | 44.8 | 41.8 | 48.9 | 53.5 | 42.7 | 45.7 | 46.2 | 45.3 | 45.9 | 47.6 | 44.1 | |
| Bison | 49.7 | 37.6 | 52.7 | 52.1 | 40.3 | 46.5 | 43.6 | 52.1 | 43.1 | 50.6 | 41.1 | |
| Carter ¹ | 50.9 | 38.1 | 53.2 | 53.9 | 41.1 | 50.5 | 42.8 | 51.9 | 42.9 | 52.1 | 41.2 | |
| CDC Buryu | 48.6 | 37.6 | 52.9 | 54.1 | 40.7 | 50.2 | 43.1 | 52.3 | 43.4 | 51.6 | 41.2 | |
| CDC Glas | 46.1 | 39.1 | 50.6 | 54.2 | 41.1 | 47.0 | 44.4 | 47.8 | 44.4 | 49.1 | 42.3 | |
| CDC Melyn ¹ | 42.8 | 40.4 | 47.4 | 53.8 | 42.0 | 43.3 | 46.1 | 46.0 | 45.3 | 46.7 | 43.4 | |
| CDC Neela | 48.0 | 38.9 | 51.4 | 51.3 | 40.4 | 48.5 | 43.3 | 51.3 | 43.1 | 50.1 | 41.4 | |
| CDC Plava | 44.4 | 39.3 | 51.6 | 53.3 | 40.7 | 46.0 | 43.7 | 47.7 | 44.8 | 48.6 | 42.1 | |
| Gold ND ¹ | 48.1 | 38.7 | 52.7 | 54.5 | 41.9 | 48.2 | 43.9 | 52.2 | 44.7 | 51.1 | 42.3 | |
| ND Hammond | 45.9 | 38.4 | 51.5 | 48.1 | 40.5 | 43.7 | 42.4 | 50.3 | 42.3 | 47.9 | 40.9 | |
| Omega ¹ | 47.3 | 38.3 | 53.4 | -- | 40.4 | 47.8 | 42.7 | 53.2 | 43.4 | -- | 41.2 | |
| Prairie Thunder | 48.6 | 37.6 | 52.1 | 54.7 | 39.9 | 48.3 | 42.6 | 51.1 | 43.1 | 51.0 | 40.8 | |
| Webster | 47.4 | 38.7 | 52.5 | 56.1 | 40.3 | 46.3 | 44.2 | 51.5 | 44.4 | 50.8 | 41.9 | |
| York | 47.4 | 37.8 | 51.7 | 53.9 | 40.4 | 47.5 | 43.0 | 51.0 | 43.7 | 50.3 | 41.2 | |
| Mean | 47.1 | 38.7 | 51.6 | 53.3 | 40.9 | 47.1 | 43.7 | 50.3 | 43.9 | 49.8 | 41.8 | |
| CV % | 3.6 | 1.9 | 0.8 | 1.5 | 4.4 | 2.7 | 1.5 | 1.3 | 0.9 | 2.9 | 1.1 | |
| LSD 0.05 | 2.4 | 1.1 | 0.6 | 1.0 | NS | 2.1 | 1.1 | 1.0 | 0.5 | 1.8 | 0.7 | |
| LSD 0.10 | 2 | 0.9 | 0.5 | 0.9 | NS | 1.8 | 0.9 | 0.8 | 0.4 | 1.5 | 0.6 | |

¹Yellow seeded.²Test weight average of five dryland trials and oil average of four dryland trials.

Table 4. 2019 Flax - Carrington - Authors, M. Ostlie and B. Schatz.

| Variety | Days to | Days to | Plant | Plant | Oil | Test | Seed Yield | | |
|-------------------------|--------------------|--------------------|--------|--------------------|---------|---------|-------------------|------------|------------|
| | Flower | Maturity | Height | Lodge ¹ | Content | Weight | 2019 | 2-yr. Avg. | 3-yr. Avg. |
| | (DAP) ² | (DAP) ² | (inch) | (0-9) | (%) | (lb/bu) | ------(bu/a)----- | | |
| AAC Bright ³ | 51 | 87 | 27 | 0 | 41.8 | 44.8 | 32.2 | -- | -- |
| Bison | 48 | 89 | 28 | 5 | 37.6 | 49.7 | 27.2 | 29.9 | -- |
| Carter ³ | 50 | 88 | 27 | 3 | 38.1 | 50.9 | 32.7 | 30.6 | 28.7 |
| CDC Buryu | 50 | 88 | 28 | 5 | 37.6 | 48.6 | 20.2 | -- | -- |
| CDC Glas | 51 | 86 | 27 | 1 | 39.1 | 46.1 | 35.1 | -- | -- |
| CDC Melyn ³ | 54 | 83 | 26 | 3 | 40.4 | 42.8 | 22.3 | -- | -- |
| CDC Neela | 51 | 83 | 27 | 2 | 38.9 | 48.0 | 31.6 | 33.7 | 31.4 |
| CDC Plava | 50 | 82 | 26 | 4 | 39.3 | 44.4 | 23.5 | -- | -- |
| Gold ND ³ | 52 | 88 | 28 | 5 | 38.7 | 48.1 | 21.3 | 27.1 | 27.6 |
| ND Hammond | 50 | 86 | 28 | 0 | 38.4 | 45.9 | 28.6 | 32.1 | 31.8 |
| Omega ³ | 51 | 87 | 28 | 5 | 38.3 | 47.3 | 19.1 | 24.5 | 25.7 |
| Prairie Thunder | 51 | 90 | 28 | 4 | 37.6 | 48.6 | 24.4 | 29.9 | 31.1 |
| Webster | 52 | 87 | 30 | 4 | 38.7 | 47.4 | 22.7 | 29.9 | 30.6 |
| York | 49 | 86 | 27 | 2 | 37.8 | 47.4 | 29.5 | 31.8 | 32.4 |
| Mean | 51 | 86 | 28 | 3 | 38.7 | 47.1 | 26.5 | 29.9 | 29.9 |
| CV % | 1 | 1.7 | 6.4 | 57 | 1.9 | 3.6 | 17.0 | -- | -- |
| LSD 0.05 | 0.7 | 2.0 | 2.5 | 2.4 | 1.1 | 2.4 | 6.6 | -- | -- |
| LSD 0.10 | 0.6 | 1.7 | 2.1 | 2.0 | 0.9 | 2.0 | 5.5 | -- | -- |

Planted: May 13. Harvested: Sept. 18. Previous crop: oat.

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

²DAP = Days after planting.

³Yellow seeded.

Table 5. 2019 Flax - Organic - Carrington - Author, S. Zwinger.

| Variety | Days to | Days to | Plant | Oil | Seed Yield | | |
|------------------------|--------------------|--------------------|--------|---------|-------------------|------------|------------|
| | Flower | Maturity | Height | Content | 2019 | 2-yr. Avg. | 3-yr. Avg. |
| | (DAP) ¹ | (DAP) ¹ | (inch) | (%) | ------(bu/a)----- | | |
| Carter ² | 53 | 89 | 25 | 41.1 | 4.9 | 16.7 | 19.4 |
| CDC Melyn ² | 53 | 89 | 25 | 44.7 | 5.9 | -- | -- |
| CDC Neela | 52 | 85 | 23 | 41.3 | 5.1 | 20.4 | 22.5 |
| Gold ND ² | 53 | 89 | 27 | 43.1 | 6.9 | 19.9 | 22.8 |
| ND Hammond | 52 | 91 | 26 | 40.8 | 6.3 | 20.9 | 24.4 |
| Omega ² | 53 | 88 | 24 | 42.0 | 6.6 | 18.3 | 21.5 |
| Pembina | 54 | 87 | 25 | 41.2 | 5.1 | 20.0 | 22.3 |
| Prairie Thunder | 48 | 83 | 24 | 40.5 | 4.9 | 20.2 | 24.6 |
| York | 50 | 91 | 25 | 40.2 | 8.8 | 21.5 | 25.5 |
| Mean | 52 | 88 | 25 | 41.6 | 6.0 | 19.7 | 22.9 |
| CV % | 1.4 | 0.7 | 4.6 | 2 | 19.7 | -- | -- |
| LSD 0.05 | 1.1 | 1.0 | 1.7 | 1.2 | 1.7 | -- | -- |
| LSD 0.10 | 0.9 | 0.8 | 1.4 | 1 | 1.4 | -- | -- |

Planted: May 14. Harvested: Sept. 4. Previous crop: cover crop.

¹DAP = Days after planting.

²Yellow seeded.

Table 6. 2019 Flax - Dickinson - Author, G. Martin.

| Variety | Days to | Days to | Plant | Oil | Test | Seed Yield |
|-------------------------|--------------------|--------------------|--------|---------|---------|------------|
| | Flower | Mature | Height | content | Weight | 2019 |
| | (DAP) ¹ | (DAP) ¹ | (inch) | (%) | (lb/bu) | (bu/a) |
| AAC Bright ² | 54 | 106 | 18 | 46.2 | 45.7 | 13.6 |
| Bison | 53 | 103 | 19 | 43.6 | 46.5 | 16.2 |
| Carter ² | 54 | 106 | 17 | 42.8 | 50.5 | 14.7 |
| CDC Buryu | 54 | 103 | 18 | 43.1 | 50.2 | 15.4 |
| CDC Glas | 55 | 105 | 20 | 44.4 | 47.0 | 13.3 |
| CDC Melyn ² | 56 | 101 | 19 | 46.1 | 43.3 | 12.1 |
| CDC Neela | 54 | 106 | 17 | 43.3 | 48.5 | 13.9 |
| CDC Plava | 55 | 104 | 17 | 43.7 | 46.0 | 9.9 |
| Gold ND ² | 54 | 106 | 20 | 43.9 | 48.2 | 14.1 |
| ND Hammond | 54 | 103 | 18 | 42.4 | 43.7 | 11.0 |
| Omega ² | 56 | 104 | 18 | 42.7 | 47.8 | 13.3 |
| Prairie Thunder | 54 | 105 | 19 | 42.6 | 48.3 | 15.9 |
| Webster | 54 | 105 | 20 | 44.2 | 46.3 | 13.9 |
| York | 54 | 107 | 18 | 43.0 | 47.5 | 18.4 |
| Mean | 54 | 105 | 18 | 43.7 | 47.1 | 14.0 |
| CV % | 1.7 | 1.6 | 6.0 | 1.5 | 2.7 | 15.0 |
| LSD 0.05 | 2.0 | 2.7 | 2.0 | 1.1 | 2.1 | 3.6 |
| LSD 0.10 | 1.0 | 2.3 | 2.0 | 0.9 | 1.8 | 3.0 |

Planted: May 6. Harvested: Sept. 19. Previous crop: Cover Crop.

¹DAP = Days after planting.

²Yellow seeded.

Table 7. 2019 Flax - Langdon - Authors, B. Hanson, T. Hakanson and L. Henry.

| Variety | Days to | Plant | Test | Seed Yield | | | | |
|-------------------------|--------------------|--------|---------|-------------------|------|------|------------|------------|
| | Flower | Height | Weight | 2017 | 2018 | 2019 | 2-yr. Avg. | 3-yr. Avg. |
| | (DAP) ¹ | (inch) | (lb/bu) | ------(bu/a)----- | | | | |
| AAC Bright ² | 52 | 23 | 48.9 | -- | -- | 38.0 | -- | -- |
| Bison | 52 | 27 | 52.7 | 48.9 | 40.0 | 40.1 | 40.1 | 43.0 |
| Carter ² | 53 | 25 | 53.2 | 47.7 | 37.6 | 42.3 | 40.0 | 42.5 |
| CDC Buryu | 52 | 24 | 52.9 | -- | -- | 41.6 | -- | -- |
| CDC Glas | 53 | 22 | 50.6 | 54.0 | 43.0 | 41.6 | 42.3 | 46.2 |
| CDC Melyn ² | 54 | 23 | 47.4 | -- | -- | 34.5 | -- | -- |
| CDC Neela | 51 | 23 | 51.4 | 46.2 | 37.6 | 43.2 | 40.4 | 42.3 |
| CDC Plava | 52 | 22 | 51.6 | -- | -- | 39.7 | -- | -- |
| Gold ND ² | 53 | 25 | 52.7 | 52.1 | 43.0 | 41.2 | 42.1 | 45.4 |
| ND Hammond | 52 | 24 | 51.5 | 48.8 | 39.2 | 38.4 | 38.8 | 42.1 |
| Omega ² | 54 | 23 | 53.4 | 45.7 | 38.5 | 38.5 | 38.5 | 40.9 |
| Prairie Thunder | 54 | 26 | 52.1 | 53.1 | 43.1 | 42.6 | 42.9 | 46.3 |
| Webster | 52 | 24 | 52.5 | 51.6 | 44.2 | 42.0 | 43.1 | 45.9 |
| York | 52 | 28 | 51.7 | 50.2 | 41.7 | 43.2 | 42.5 | 45.0 |
| Mean | 52 | 24 | 51.6 | 49.8 | 40.8 | 40.5 | 41.1 | 44.0 |
| CV % | 1.3 | 5.0 | 0.8 | 6.6 | 7.9 | 5.8 | -- | -- |
| LSD 0.05 | 1.1 | 2.0 | 0.6 | 4.7 | NS | 3.9 | -- | -- |
| LSD 0.10 | 0.9 | 1.7 | 0.5 | 3.9 | NS | 3.2 | -- | -- |

Planted: May 14. Harvested: Sept. 16.

¹DAP = Days after planting.

²Yellow seeded.

Table 8. 2019 Flax - Dryland - Williston - Authors, J. Bergman and G. Pradhan.

| Cultivar | Days to Flower (DAP) ¹ | Days to Maturity (DAP) ¹ | Plant Height (inch) | Test Weight (lb/bu) | Oil Content (%) | Seed Yield | | |
|-------------------------|--------------------------------------|--|------------------------|------------------------|--------------------|-------------------|------------|------------|
| | | | | | | 2019 | 2-yr. Avg. | 3-yr. Avg. |
| | | | | | | ------(bu/a)----- | | |
| AAC Bright ² | 54 | 94 | 26 | 45.3 | 45.9 | 21.5 | -- | -- |
| Bison | 54 | 94 | 28 | 52.1 | 43.1 | 12.6 | 14.1 | 13.5 |
| Carter ² | 53 | 95 | 25 | 51.9 | 42.9 | 13.9 | 14.9 | 13.3 |
| CDC Buryu | 53 | 94 | 27 | 52.3 | 43.4 | 26.8 | -- | -- |
| CDC Glas | 55 | 94 | 28 | 47.8 | 44.4 | 21.4 | 18.3 | 16.4 |
| CDC Melyn ² | 56 | 94 | 26 | 46.0 | 45.3 | 15.3 | -- | -- |
| CDC Neela | 56 | 97 | 24 | 51.3 | 43.0 | 16.3 | 16.6 | 15.0 |
| CDC Plava | 55 | 95 | 26 | 47.7 | 44.7 | 28.8 | -- | -- |
| Gold ND ² | 55 | 95 | 28 | 52.2 | 44.7 | 14.0 | 15.1 | 13.6 |
| ND Hammond | 54 | 96 | 26 | 50.3 | 42.3 | 15.9 | 13.8 | -- |
| Omega ² | 56 | 94 | 27 | 53.2 | 43.4 | 21.8 | 21.2 | 17.4 |
| Prairie Thunder | 55 | 95 | 28 | 51.1 | 43.1 | 19.3 | 15.2 | 14.0 |
| Webster | 54 | 97 | 28 | 51.5 | 44.4 | 13.2 | 13.4 | 12.2 |
| York | 54 | 94 | 27 | 51.0 | 43.7 | 16.2 | 17.1 | 14.6 |
| Mean | 55 | 95 | 27 | 51.2 | 44.0 | 17.4 | 16.0 | 14.4 |
| CV % | 2.2 | 2.1 | 6.2 | 1.3 | 0.8 | 21.4 | -- | -- |
| LSD 0.05 | 1.7 | 2.8 | 2.3 | 1.0 | 0.5 | 5.2 | -- | -- |
| LSD 0.10 | 1.4 | 2.3 | 2.0 | 0.8 | 0.4 | 4.4 | -- | -- |

Planted: May 3. Harvested: Sept. 23. Previous crop: cover crop.

¹DAP = Days after planting.²Yellow seeded.**Table 9. 2019 Flax - Irrigated - Williston - Authors, J. Bergman, T. Tjelde and J. Jacobs.**

| Cultivar | Days to Flower (DAP) ² | Days to Maturity (DAP) ² | Plant Lodge ¹ (0-9) | Plant Height (inch) | Test Weight (lb/bu) | Seed Yield | | |
|------------------------|--------------------------------------|--|-----------------------------------|------------------------|------------------------|-------------------|------------|------------|
| | | | | | | 2019 | 2-yr. Avg. | 3-yr. Avg. |
| | | | | | | ------(bu/a)----- | | |
| Bison | 60 | 94 | 0.5 | 29 | 52.6 | 38.7 | 30.2 | 33.1 |
| CDC Bethume | 58 | 96 | 0.0 | 28 | 52.7 | 29.2 | -- | -- |
| CDC Glas | 58 | 94 | 0.3 | 25 | 51.8 | 21.2 | 22.5 | 27.5 |
| CDC Melyn ³ | 58 | 92 | 0.0 | 26 | 53.3 | 25.2 | 28.5 | -- |
| CDC Sanctuary | 59 | 94 | 0.3 | 28 | 51.9 | 36.6 | 29.8 | 32.4 |
| CDC Sorrel | 58 | 95 | 0.3 | 29 | 52.5 | 33.9 | 27.6 | 29.6 |
| Gold ND ³ | 59 | 97 | 0.0 | 28 | 53.3 | 31.2 | 26.7 | 30.6 |
| ND Hammond | 58 | 94 | 0.3 | 28 | 52.5 | 35.2 | 29.2 | -- |
| Pembina | 59 | 95 | 0.5 | 28 | 52.7 | 29.9 | 26.5 | -- |
| Prairie Thunder | 60 | 95 | 0.3 | 31 | 52.7 | 38.0 | 28.8 | -- |
| Rahab 94 | 60 | 94 | 0.0 | 28 | 52.1 | 29.6 | 26.2 | -- |
| York | 59 | 95 | 0.0 | 26 | 52.4 | 32.8 | 27.9 | 30.8 |
| Mean | 59 | 94 | 0.2 | 28 | 52.5 | 31.8 | 27.6 | 30.7 |
| CV % | 2.1 | 2.5 | 208.9 | 6.6 | 1.4 | 18.8 | -- | -- |
| LSD 0.05 | 1.8 | 3.4 | NS | 2.6 | 1.0 | 8.6 | -- | -- |
| LSD 0.10 | 1.5 | 2.9 | NS | 2.2 | 0.9 | 7.2 | -- | -- |

Planted: May 6. Harvested: Aug. 30. Previous crop: corn.

¹Lodging: 0 = none, 9 = lying flat on the ground.²DAP = Days after planting.³Yellow seeded.

Table 10. 2019 Flax - Minot - Author, E. Eriksmoen.

| Variety | Days to Flower (DAP) ¹ | Plant Height (inch) | Oil Content (%) | Test Weight (lb/bu) | Seed Yield 3-yr. Avg. ² (bu/a) |
|-------------------------|--------------------------------------|------------------------|--------------------|------------------------|---|
| AAC Bright ³ | 54 | 22 | 42.7 | 53.5 | -- |
| Bison | 53 | 23 | 40.3 | 52.1 | 18.5 |
| Carter ³ | 54 | 23 | 41.1 | 53.9 | 17.7 |
| CDC Buryu | 53 | 21 | 40.7 | 54.1 | -- |
| CDC Glas | 55 | 23 | 41.1 | 54.2 | 20.2 |
| CDC Melyn ³ | 55 | 22 | 42.0 | 53.8 | -- |
| CDC Neela | 54 | 23 | 40.4 | 51.3 | 22.5 |
| CDC Plava | 54 | 19 | 40.7 | 53.3 | -- |
| Gold ND ³ | 55 | 25 | 41.9 | 54.5 | 17.4 |
| ND Hammond | 53 | 23 | 40.5 | 48.1 | 17.5 |
| Omega ³ | 55 | 22 | 40.4 | -- | 16.6 |
| Prairie Thunder | 55 | 23 | 39.9 | 54.7 | 18.2 |
| Webster | 55 | 23 | 40.3 | 56.1 | 16.9 |
| York | 54 | 23 | 40.4 | 53.9 | 17.2 |
| Mean | 54 | 23 | 40.9 | 53.3 | 18.3 |
| CV % | 1.4 | 6.1 | 4.4 | 1.5 | -- |
| LSD 0.05 | 1 | 2 | NS | 1.0 | -- |
| LSD 0.10 | 1 | 2 | NS | 0.9 | -- |

Planted: May 6. Harvested: Sept. 1. Previous crop: spring wheat.

¹DAP = Days after planting.

²Average of 2017, 2018 and 2019.

³Yellow seeded.

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