



Annual forage cereals play an important role in the Peace region where short growing season and variable precipitation rates are a challenge. They can produce high amounts of biomass and high-quality feed for livestock, especially when the perennial forage resources are limited. Besides that, annual forage cereals such as wheat, oats, barley and triticale can improve soil structure by addition of residues and more organic matter to soil, this can in turn lead to enhanced water holding capacity and improved soil health in high clay and poor-quality soils in the Peace Region. This trial examines different varieties of annual forage cereals in terms of yield to help producers select varieties that are best suited to their soils.

This small-plot research trial focused on the productivity of various annual forage cereals including barley, oats, wheat, and triticale. The varieties used in this study were Canmore, CDC Maverick, CDC Cowboy, AB Cattelac, Altorado, CDC Coalition and AAC Lariat barley, Ore3542M, CDC Nasser, AC Morgan, CDC Baler, CDC Haymaker and Murphy oats, and AC Sadash, KWS Alderon, AC Andrew, AAC Awesome wheat, and Taza, Sunray and AAC Delight triticale. Also, CDC Austenson (barley) was used as check variety.

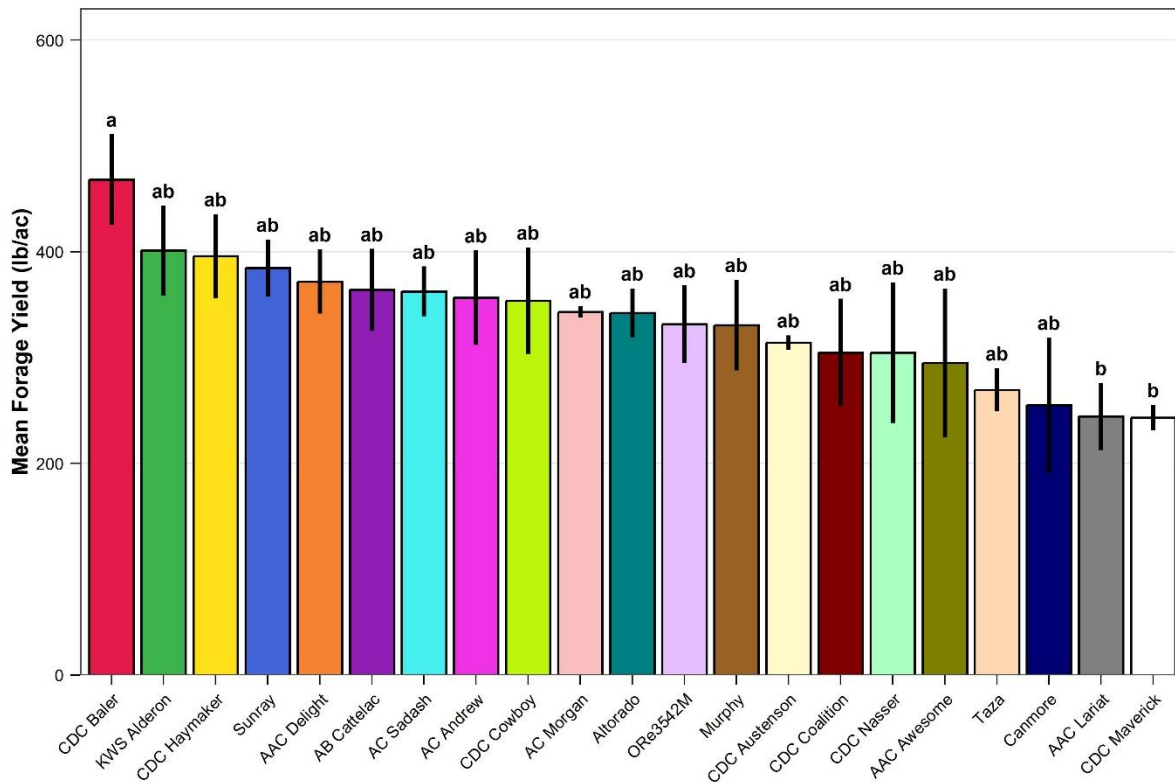
### Key Points:

CDC Baler oats produced the greatest forage biomass  
CDC Maverick and AAC Lariat barley yielded less than the other varieties

| Task        | Timeline         | Details                                                                                                                                                    |
|-------------|------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Seeding     | May 27           | Wheat 105-165 lb/ac<br>Barley 80-150 lb/ac<br>Oats 82-112 lb/ac<br>Triticale 120-152 lb/ac                                                                 |
| Maintenance | May 21 - July 14 | Urea 110 lb/ac<br>S15 80 lb/ac<br>Glyphosate (pre-seed) 1 L/ac<br>Fluroxypur 240 mL/ac<br>Clopyralid 84 mL/ac<br>MCPA Ester 281 mL/ac<br>Coragen 0.71 L/ac |
| Harvest     | Aug. 18          | Forage harvester                                                                                                                                           |

The varieties tested in this trial were:

| Barley                                                                                                                                   | Wheat                                                            | Triticale                              |
|------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------|----------------------------------------|
| 1. Canmore<br>2. CDC Maverick<br>3. CDC Cowboy<br>4. AB Cattelac<br>5. Altorado<br>6. CDC Coalition<br>7. AAC Lariat<br>8. CDC Austenson | 1. AC Sadash<br>2. KWS Alderon<br>3. AC Andrew<br>4. AAC Awesome | 1. Taza<br>2. Sunray<br>3. AAC Delight |



**Silage yield (lb/ac) of different varieties of annual forage cereals**

Our results revealed that some significant differences can be observed between a few of the varieties while most of the other varieties demonstrated statistically comparable performance. CDC Baler oats had better yield than the other varieties, suggesting its suitability for forage production in this region. However, two barley varieties- CDC Maverick and AAC Lariat- had the lowest yield compared to the other treatments. There were no significant differences between the other cereal crops. These results provide useful information for producers in the North Peace Region in selecting cereal varieties to increase silage yield. Further research is required to evaluate the quality of silage as well as the impacts of these annual forage cereals on weeds, diseases and pests under local growing conditions.