



WestMET Agriproducts

**2020 HUMALITE TRIAL REVIEW
AND ECONOMICAL ANALYSIS**





Methods

- Raw Humalite was applied at 100lb and 250lb both Coarse and Fine
- **Treatments:**
 - Raw Humalite (RH) and Raw Humalite Screened (RHS) at 100 and 250 lb/A
 - Control with no humalite
- **Trialed on:**
 - Oats for biomass on Sheerness reclamation
 - Canola on neighboring productive farm land
 - Study was located near Hanna, Alberta
- **Compared against control plot**
 - Oats and canola with no humalite product added

Results

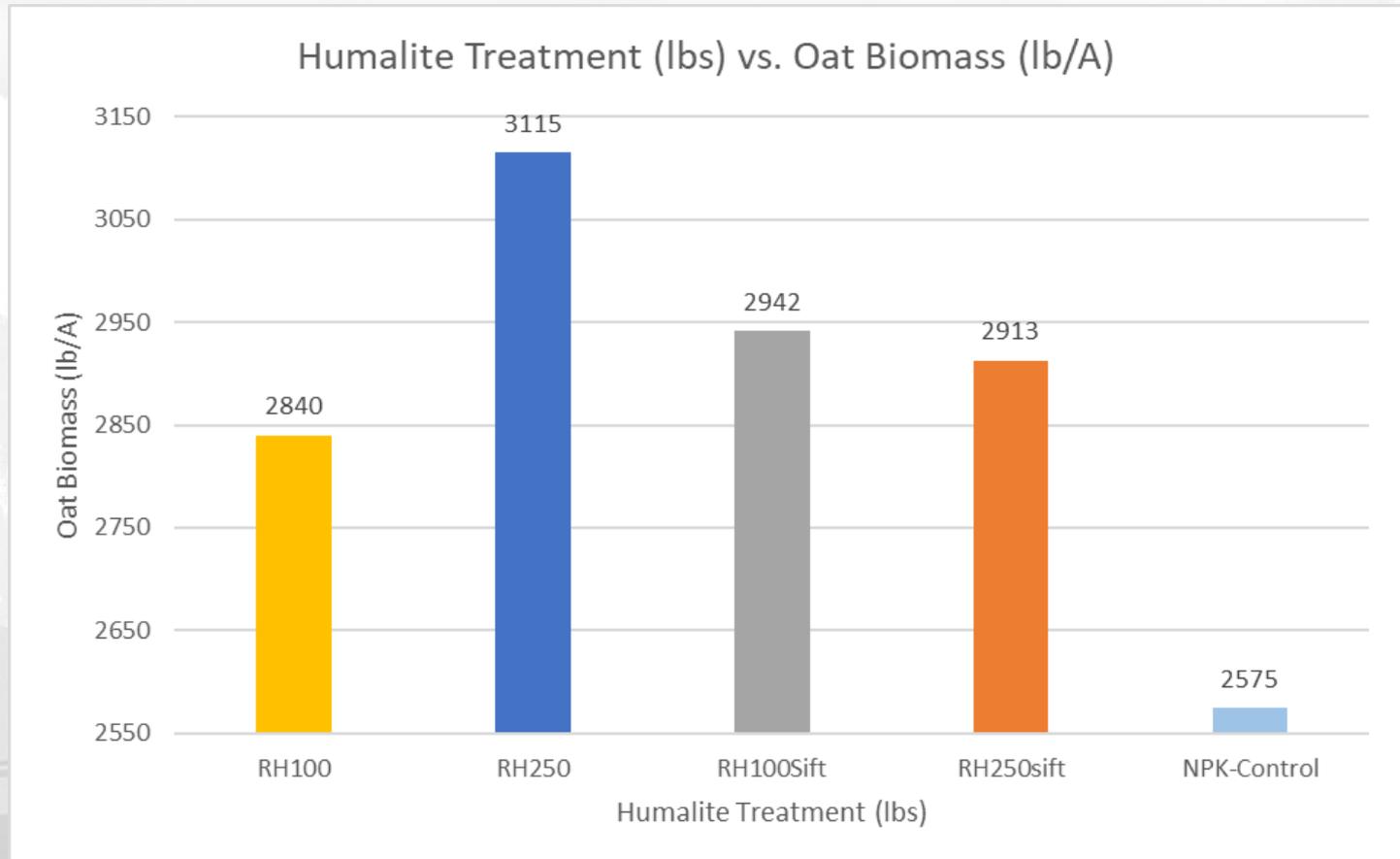


Figure 1. Oat biomass (lb/A) that result from the application of 4 humalite applications in lbs (100, 250, 100 sifted, 250 sifted). Sifted applications indicate the product was ensured to be void of large lumps of humalite product. No humalite product was added in the control group. Treatment groups were not significantly different.

Results

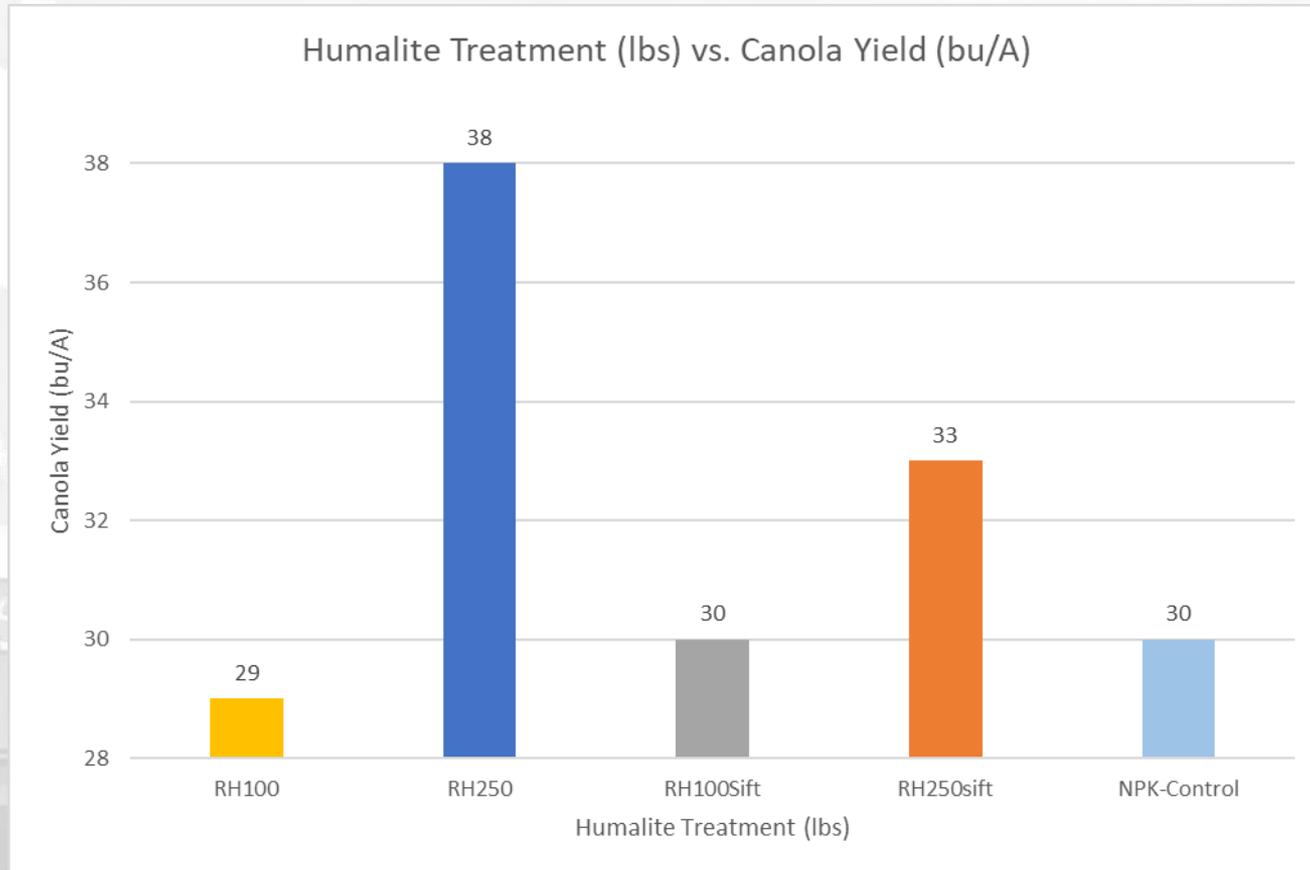


Figure 2. Canola yield (bu/A) as a result of humalite product application at 4 different amounts in lbs (100, 250, 100 sifted, 250 sifted). Sifted applications indicate the product was ensured to be void of large lumps of humalite product. No humalite product was added in the control group. Treatment groups were not significantly different.



Key Findings

- Differences in parameters evaluated for the annual cropping systems (Canola Yield) and the Land-remediation site (Oat biomass, crude protein content, and feed analysis) between each treatment are present
- Canola yields with 100 lb/A of humalite treatment saw yields higher than the average for the area (27-30 bu/A) at 38 bu/A
- Trends show that application of humalite increases canola yield up to 9 bu/A and up to 1100 lb/A of oat biomass
- From CARA Trial: Evaluation of Raw and Processed Humalite on Soil Health Indicators in Two Agro-ecosystems (Annual and Land-Remediation)
 - “Applications of these materials, show a trend of increasing canola yield up to 9bu/A and up to 1100 lb/A of oat biomass when they were compared with the control”



Economics

- Economics done using an application rate of 100lb per ac @\$150/tonne = \$6.82/acre
- Oat Biomass
 - Increased yield by 316lb/ac (12% over control)
 - Increased profit on 316lb @ \$120/ton = \$18.96/ac
 - Return per acre = \$12.14



Economics

- Canola
 - Increased yield by 6.5 bu/ac (22% over control)
 - Increased profit on 6.5 @ \$18/bu = \$117/ac
 - Return per acre = \$117



Considerations

- Based on 1 year trial data completed by CARA. More years of trial data will increase certainty of the results.
- These trials were done a wet year for the area. Special Areas #2 @ 11.4in of rain.
- Expectations would be for the Humalite to have a larger impact on drier years.
- Further trails will be completed to determine the correct application rate. Higher rates could mean higher yields.