MORE CORN

Introduction:

Corn as a crop for silage, grazing, or grain, has been increasing in popularity throughout the current millennium in north central Alberta. In the past, GRO has struggled to accurately place seed corn in trials, since the only method available was to hand seed it, severely limiting the plots available for research or demonstration. As a result, GRO was restricted to planting only one small contract corn plot. In the fall of 2023, GRO was fortunate to find and obtain a used 2-row precision planter, with variable row spacing and discs that could place all sizes of seed from corn down to canola with precision.

The spring of 2024 was to be an experimental year for our use of the planter. Not only were we then able to plant our regular contract plot with much greater ease, but we also put in a variety demonstration. In addition, demand was such that GRO was asked to contract plant a plot for another ARA, which was an indication of the need for such a planter for a number of research groups in future years. This work gave us an understanding of the issues associated with such a practice.

Trial 1: RDAR PREP work:

The Results Driven Agricultural Research (RDAR) organization has a program that supports producer-led on-farm research or demonstrations, known as PREP (Producer Research and Evaluation Program). In 2024, GRO agreed to assist Colby Hansen in gathering a set of PREP information that was to be obtained from this proposal. One of those sets of samples taken may indicate that when planted with a cover crop, a lower corn population may lead to a much higher total volume and possibly higher quality.

There were several other trials discussed in Colby's application, and it is likely that GRO will help Colby coordinate more of this work in 2025. GRO gratefully acknowledges the support for the Hansen's trials from the RDAR PREP program.

Corn Demonstration Project 2:

As was previously mentioned, many area producers are interested in corn production. Some are also thinking that cover crops in association with their corn is a method of maximizing their net return per acre. Another GRO producer and Board member, Byron Long, has attempted to conduct some corn row spacing/cover crop work, and the technical staff of GRO were happy to try and get some data from this demonstration.

Byron planted corn in rows spaced 90, 54 and 42 inches apart. While the results were not fully replicated to definitely indicate a significant difference, it appears as if there is no yield penalty to going to wider row spacing, up to 90 inches. The same seems to apply when cover crops are interseeded with the corn. Of course, further replicated research is required to determine if there might be actual benefits to interseeding and wider row spacing, but with the corn planter, GRO should be able to more easily work with Byron to create replicated trials in the future.

Corn Tour

In addition to these trials and demonstrations, GRO was able to work with Farming Forward to conduct a corn tour, where a number of agronomic activities were demonstrated, including the row spacing and intercropping work mentioned above. The tour also visited a local producer to discuss plastic mulch application to enhance growth and maturity of the crop, and corn for seed production. As more replicated corn work is conducted by GRO, it is likely similar tours will occur in the future with more increased replicated data for the crop as silage, intercropping and grain.

Conclusion

While 2024 may not have been an ideal year for GRO and its statistically valid corn work, it is obvious that the purchase of this precision, variable row spacing corn seed drill is going to prove to be a valuable addition to the equipment fleet, and there will be an increase in statistically valid results available for producers in north central Alberta in the future.