

## Focus on Increased on-Farm scale research

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*Swathing through a canola fertility trial.*

Field scale research can offer big benefits when done effectively, but it can also be time consuming, require specific tools and demand attention at challenging times in the season. Also, sometimes it's hard to do research in isolation because you can't compare your results with anyone.

This is what prompted Farming Smarter to try assuming a management role for organizing, executing and reporting field scale trials. It expects this service to intrigue anyone that wants to research something about growing crops in southern Alberta.

According to Lewis Baarda, Farming Smarter On Farm project leader, "The Field Tested program offers individual farmers, small groups of farmers, crop commissions, government scientists or industry colleagues a useful service." The expectation is that there are projects that can attract funding from both public and industry sources to perform field scale research because it can have a broader benefit beyond those directly involved.

Demand for On-Farm Research (OFR) grows as producers want to see new products and technologies validated in a real-world field setting. Research scientists, companies, and grower groups also want to verify that research successfully transitions from plot research or laboratory stage to a field environment.

Reliable OFR faces challenges such as weather, management strategies, and resource limitations at critical times that can affect procedures and results. OFR requires a unique approach. It needs to follow past research into effective trial design, implementation, and statistical analysis.

Farming Smarter conducted field-scale trials for nearly a decade. Many of these trials were complex and required its team to extract meaning from many layers of intricate data. They learned to use the variability in both the environment and in trial results to improve the information generated from on-farm trials.

Effective OFR needs to go beyond using weigh wagons to pool complex and nuanced data sets into large groups. It needs spatial analysis and precision agriculture tools to raise the bar for OFR. Additionally, there are challenges specific to the design, implementation, and analysis of OFR.

This project will experiment with bringing the resources of trained staff and experience to conduct effective and reliable OFR and by training producers to execute reliable field-scale trials. Its success will see field scale research become a potential profit line for farmers and a learning environment where everyone can benefit.

Farming Smarter received 2018 funding through the [Agriculture Funding Consortium](#) to move this project forward. Lewis Baarda encourages anyone interested in this type of project to contact him through Farming Smarter.

“We’re certainly interested in hearing from people that might want our help around creating a project under the Field Tested program,” he said.