

ON FARM RESEARCH

A friend of mine recently posted a western producer article on twitter that reported on a 3 year study concluding that fungicide and fertilizer did little to aid in crop recovery from hail.

What I found fascinating were the wildly varied reactions from producers and agronomists. I saw everything from "I tell my clients if they want to feel better, give me \$20/acre and don't go to the field for a week" to "I've got a \$45 cocktail that has gotten me 16 to 20 bushels of canola". This study did not even include canola for some reason, yet that seems to be the crop most of the people chipping in with their opinions had the most experience with, and many tried to extrapolate the results on wheat, peas and dry beans to support their own position on how effective similar treatments are in canola. While the conversation never hit the levels of civility and tolerance we have come to expect from social media (which is none), it did quickly devolve into a spirited discussion about what products work/don't work and how do you "prove" you are getting a response.

WILDLY VARIED REACTIONS FROM PRODUCERS & AGRONOMISTS

[Click here for the original article](#)



Now I am not about to jump into the middle of this debate, but I think what the conversation drove home for me was how many variables producers have to deal with each year; every hauled out crop has unique underlying conditions such as soil type and texture, soil fertility levels, the impact of rotation, the levels of the disease, insect and weed populations, as well as environmental conditions etc. On and on and on it goes. Plus, these conditions are not stable. A wheat crop in 2016 may have faced many different variables than a wheat crop on in the same field in 2020. This leads to things working in some years, but not others, leaving confusion as to what actually was influencing the results seen in the field.



So how do you minimize the impact all these uncontrollable variables and focus in on a product or practice that you want to learn more about? While the only thing that addresses season to season variability is repetition over several years to see how that product /practice responds to varying environments, there are things you can do to limit the impact of variables within a field during a growing season.

A great place to start is with The Indian Head Agricultural Research Foundation (IHARF), who has developed some tools for producers wishing to conduct basic field experiments. The *IHARF On-Farm Research Guide and Data Analysis Tool* give producers guidelines on how to set up trials. This 9 page downloadable PDF file gives several options for trial design, as well as suggestions on plot size and data collection. There is even a downloadable excel spreadsheet that applies basic statistical analysis to the data recorded. All of this can be found at the IHARF website in "On Farm Tool" under the research tab. <https://iharf.ca/on-farm-tool/>.

The key to learning from field trials is to keep it simple. Don't try to compare too many things all at once – you may be introducing unforeseen variables, and data collection can become a nightmare during a busy harvest if there are too many treatments to track. Also, make sure you design your trials so they are replicated and repeatable so you can test the same product or practice over multiple seasons. IHARF has decades of experience in conducting agricultural research trials of all sizes and types. While you may not decide to follow all of the suggestions in the guide, it is certainly worth a look to get an idea on how to set up and conduct your own on-farm trials.

KEEP IT SIMPLE



WAYNE SPURRILL, P. AG

AGRONOMIST

Cell 780 761-1616

Office 780 672-4463

wspurrrill@briltd.com