



Issue 400: September 2018

## **Interpreting Plot Results to Make Informed Buying Decision**

*Corey Prosser, Technical Team Agronomist, CCA – LG Seeds*

As harvest begins for many parts of the Midwest, so does the harvest of plots. Plots are a tremendous tool that not only Sales Account Managers have to use to sell, but growers have to help with making decisions. Every year growers analyze their yield results along with plot data to help pick hybrids for the upcoming year. With so many different hybrids in LG Seeds lineup, picking the right hybrid can be a difficult decision. Plot data can help with these buying decisions, if you interpret them correctly. Below are major factors to consider when comparing plot results. [Here is a copy of a corn plot from 2017 that has different areas highlighted that I will touch on.](#)

The first and possibly the most important piece of information is plot location. This is highlighted in red on the example plot. When reviewing plots be sure to look at plots that are closest to your operation. I enjoy looking at plot data from Iowa, but Ohio is completely different in many aspects. With that said, Iowa plot data would not be very relevant to my operation. Many times, there are not an abundance of plots in your immediate area, so you are forced to expand to see more data. This is perfectly fine just keep in mind where those plots are located as growing conditions could be drastically different. When expanding your search make sure to keep in mind the other important factors below.

The next key factor to consider is previous crop. This is highlighted in yellow on the example plot. Products, both corn and soybeans, can perform quite differently in different cropping rotations. Some hybrids may become more susceptible to disease, and thus impact performance, if placed in a continuous corn situation for example. This is most important for growers who are in a continuous corn or soybean situation versus those in rotations. Plant health and disease will be affected by planting rotations and will impact yields so make sure to check if fungicides were applied.

The next factor is tillage which is highlighted in blue on the example plot. This is very similar to cropping rotation as tillage can affect a products performance. There are many products such as LG5565 which has great early vigor and emergence that shine in no till plots. This factor is one of the top question's growers ask me about each plot. Make sure to compare plots with your tillage practices the best you can. This will help with product placement, the last thing you want to do is place a slow emerging product with average vigor in cool, wet, no-till clay fields.

Other key factors highlighted in green are planting population and row spacing. These are very important to help determine how different hybrids respond to populations. Full flex hybrids and semi-flex hybrids respond differently to population. Finding the perfect population for each hybrid on your farms can be challenging. This is where Advantage Acre<sup>®</sup> can be an extremely useful tool. Along with population goes row spacing. This is not as big of a factor in corn as many grower's plant in 30 inch rows but is huge in soybeans. Soybeans respond very differently to row spacings rather its 7.5-inch rows all the way to 30-inch rows. Make sure that your comparing data to your planting standards. If a variety wins a 30-inch row bean plot at 140,000 population but you plant 170,000 population on 7.5-inch rows the results could be very different.

As we continue to analyze plot data, soil type and fertility are important. Hybrids will perform differently on a clay loam vs a loamy sand. As not all clay loams are the same it is important however to focus on plots that have similar soil types to your operation. Fertility information can be very important if the information is available. This is not the case for all plots. As you can see on the example highlighted in orange, this plot had 194 units of Nitrogen. As this is important to know, there is no other fertility information, so this data can be misleading. What form of N and when applied can make a difference and that info is not listed. Fertility information can be useful, but if not complete don't make decisions on that factor.

The last highlighted factors on the example is in purple which are drainage and irrigation. Drainage can go along with soil type but not always. Different soil types drain much differently depending on lower soil horizons and if any subsurface drainage is in place. Many hybrids struggle under poorly drained conditions and can greatly impact yield, which makes checking this an important step. Irrigation, while in Ohio is very limited, can be a huge factor for growers in the central and western parts of the US. Make sure that you focus on plots that have the irrigation practices that you perform.

After looking at all these factors it's time to dig in and analyze yield data once you have selected the plots that you feel best fit your operation. When looking at the plot data always try to use plots that have multiple checks to help insure that it is a fair test. Many fields can change affecting yield data, why checks are important. While looking at the data also look at multiple years of data to see year in and year out performance of products if available. Consistency can be key to picking the right hybrid for your operation. Make sure to avoid planting the whole farm to the plot winner, especially if it is a new product with limited data. While it is great to try new product, make sure you pair it with a proven performer. Planting a package can help insure that you don't experience a major issue by spreading your risk over your acres.

Many times, all the yield data, and plot data can be overwhelming. Make sure to reach out to your Technical Team Agronomist and they can help assist you with analyzing the plot data. Your agronomist can provide you with yield data from multiple plots and help with insight on the products that help you make an informed buying decision. Make sure to also look at third-party data from a reliable source, such as university trials or FIRST trials. I hope everyone has a safe and bountiful harvest and thank you for your support of LG Seeds.

Note: The information in this issue is based upon field observations and third-party information. Since variations in local conditions may affect the information and suggestions contained in this issue, LG Seeds disclaims legal responsibility therefore. Always read and follow label instructions. Advantage Acre®, LG Seeds and design are trademarks of AgReliant Genetics, LLC.