Multi-hybrid planting is the next revolution when it comes to increasing whole-farm yields. AgriGold believes that Field Variability and Field GX are two key factors that must be considered when thinking about multi-hybrid planting.

Understanding Field Variability can help our customers evaluate their fields and better anticipate the results of applying precision farming techniques like multi-hybrid planting. The level of Field Variability identified could then determine the yield response for every field. The Field Variability in some locations may be low and some may be extremely high. With this in mind, the benefits and yield responses of a multi-hybrid planting system could have a dramatic range depending on weather conditions and farming practices in a given year.

**FIELD GX MEETS FIELD VARIABILITY**

Multi-hybrid planting is the next revolution when it comes to increasing whole-farm yields. AgriGold believes that Field Variability and Field GX are two key factors that must be considered when thinking about multi-hybrid planting.

Utilizing tools like Advantage Acre®, growers can evaluate a field’s variability and better anticipate the results of applying precision farming techniques like multi-hybrid planting. The level of Field Variability identified could then determine the yield response for every field. The Field Variability in some locations may be low and some may be extremely high. With this in mind, the benefits and yield responses of a multi-hybrid planting system could have a dramatic range depending on weather conditions and farming practices in a given year.

**MULTI-HYBRID RESPONSE TO FIELD VARIABILITY IMPACTS YIELD RESPONSE**

Utilizing tools like Advantage Acre®, growers can evaluate a field’s variability and make better management decisions.

Fields with **low variability** could have very little difference in terrain, have one or two soil types with similar characteristics, and have the same or similar drainage capabilities.

Fields with **high variability** could have slight-to-large difference in terrain, have multiple soil types with totally different characteristics, and have multiple drainage patterns throughout the field.

**FIELD GX**

Remember, Field GX is all about the genetics. Some genetics maximize their yield potential in well-drained soils under given management practices and other genetics can maximize their potential in poorly drained environments with another set of management practices. That is why AgriGold developed Field GX.

Field GX is a genetic system that distinguishes between the different types of AgriGold germplasm. This unique genetic diversity offers growers more choices, reduced risk and is a distinct advantage with AgriGold. The FIELD GX system offers multiple genetic backgrounds that are characterized in families. Currently, we utilize 5 key genetic backgrounds in the portfolio: GXA, GXB, GXF, GXG and GXH.
Utilizing AgriGold’s unique Field GX and superior knowledge of genetics allows for maximum results of practices like multi-hybrid planting. AgriGold finished up its fourth year of testing with multi-hybrid planting technology. The goal of the project is to match management zones within each field with the right Field GX hybrid and maximize yield results.

**MULTI-HYBRID RESULTS (4 year summary)**

AgriGold’s 4 year data in Western Iowa is showing a trend of positive results! When analyzing the overall multi-hybrid yield advantage of 6.9 bu. to date, we have experienced a high of 8.14 bu./acre 2016 vs the lowest advantage of 5.93 bu./acre in 2017, with 2014-15 ranging between 6-7 bu. increase respectively.

<table>
<thead>
<tr>
<th>YEAR</th>
<th>TOTAL MH ADV (BU/AC)</th>
<th>DEF HYBRID ADV (BU/AC)</th>
<th>OFF HYBRID ADV (BU/AC)</th>
<th>NATIONAL YIELD (BU/AC)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014</td>
<td>+6.60</td>
<td>NA</td>
<td>NA</td>
<td>+171.0</td>
</tr>
<tr>
<td>2015</td>
<td>+6.97</td>
<td>+0.53</td>
<td>+4.40</td>
<td>+168.4</td>
</tr>
<tr>
<td>2016</td>
<td>+8.14</td>
<td>+0.88</td>
<td>+6.40</td>
<td>+174.6</td>
</tr>
<tr>
<td>2017</td>
<td>+5.93</td>
<td>+0.72</td>
<td>+7.14</td>
<td>+176.6</td>
</tr>
<tr>
<td>AVG</td>
<td>6.9</td>
<td>8.0</td>
<td>5.98</td>
<td>172.7</td>
</tr>
</tbody>
</table>

When breaking it down into defensive advantages vs offensive advantages, a story is being told. The 3 year yield advantage shows most strength of 8 bu./acre when a defensive hybrid is placed correctly in lower producing environments vs an offensive hybrid placed incorrectly in the same lower producing environment. On the flip side, the data is suggesting a 5.98 bu. advantage when an offensive hybrid is placed correctly in a higher producing environment vs a defensive hybrid place incorrectly in the same high producing environment. One thing to notice is the offensive yield advantage increase of 7.14 bu. in 2017, which ironically was the highest yielding year the US has ever experienced.

1. **USE DIVERSIFIED AGRIGOLD GENETIC FAMILIES**
   Contact your local AgriGold Representative to learn about Field GX or reference pages 8-9 of this guide

2. **PURCHASE THE PLANTING EQUIPMENT**

3. **USE ADVANTAGE ACRE OR PRECISION AG PLATFORM OF YOUR CHOICE**
   Before choosing, ask if it’s capable of the following:
   - Is it capable of writing a dual-hybrid script?
   - Can it analyze multiple years of yield and soil test data?

AgriGold is proud to offer Advantage Acre® as a digital technology tool for variable rate and multi-hybrid recommendations.

Performance may vary from location to location and from year to year, as local growing, soil and weather conditions may vary. Growers should evaluate data from multiple locations and years whenever possible and should consider the impacts of these conditions on the grower’s fields.