DROUGHTGARD® HYBRIDS TECHNOLOGY COMPARISON

TRIAL OVERVIEW

• Dryland/rainfed environments can be highly variable. Farmers look at the long-term weather forecast, stored soil moisture, and production practices to make the best decision they can on what crop will be the most viable and profitable in the environment.
• Farmers look for corn products that can adapt to and yield across a wide range of environments.
• DroughtGard® Hybrids corn products were developed for this type of situation. They combine drought-tolerant germplasm with the industry’s only biotech trait for drought tolerance, which improves the ability of the corn plant to handle water stress.
• The biotech trait was released in 2012 and has been deployed in various corn products since.

RESEARCH OBJECTIVE

• To evaluate the performance of DroughtGard® Hybrids corn products compared to AQUAmax® competitive corn products in a dryland environment in south central Nebraska.

<table>
<thead>
<tr>
<th>Location</th>
<th>Soil</th>
<th>Previous Crop</th>
<th>Tillage Type</th>
<th>Planting Date</th>
<th>Harvest Date</th>
<th>Potential Yield/Acre</th>
<th>Planting Rate/Acre</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gothenburg, NE</td>
<td>Hord silt loam</td>
<td>Winter wheat</td>
<td>No tillage</td>
<td>05/13/2017</td>
<td>11/10/2017</td>
<td>210 bu/acre</td>
<td>22,000 seeds/acre</td>
</tr>
</tbody>
</table>

SITE NOTES:
• In 2016, winter wheat yields were approximately 90 bu/acre, providing excellent residue cover for water conservation in the trial. Approximately 4 feet of stored soil moisture was available at planting amounting to about 8 inches of plant-available water. Rainfall amounted to: May 2.53 in., June 0.75 in., July 1.52 in., August 3.63 in., and September 2.4 in.
• The study was a randomized complete block with three replications.
• Study plots were large strips - plot length was 435 feet long by 10 feet wide.
• Weeds were controlled uniformly across the study and no fungicides or insecticides were needed to control other pests.

UNDERSTANDING THE RESULTS

Figure 1. Average yields of DroughtGard® Hybrids corn products and AQUAmax® corn products
DroughtGard® Hybrids corn products had high yields in an environment that saw early-season moisture stress, with the month of June having 10 days that were 90 °F or warmer.

All DroughtGard® Hybrids products yielded more than the 111RM-COMP AQUAmx® product, and nine of the products yielded more than the 114RM-COMP AQUAmx product.

The only DroughtGard® Hybrids product that did not out yield the 114RM-COMP product was a 103RM product that had significantly less time to grow before maturing and endured a longer period of stress between the initiation of flowering and the minimal rains in late July that relieved some moisture stress.

The top four DroughtGard® Hybrids products yielded, on average, 21 bu/acre more than the competitor’s products.

**WHAT DOES THIS MEAN FOR YOUR FARM?**

Farmers can have confidence that DroughtGard® Hybrids corn products can obtain high yields in dryland environments, protecting yield potential from a risk of yield loss from drought stress.

Farmers should work closely with their local seed sales team to select a corn product that best fits their yield goals and management operation.

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**LEGAL STATEMENT**

The information discussed in this report is from a single site, replicated demonstration. This information piece is designed to report the results of this demonstration and is not intended to infer any confirmed trends. Please use this information accordingly.

For additional agronomic information, please contact your local seed representative. Developed in partnership with Technology Development & Agronomy by Monsanto.

*Individual results may vary,* and performance may vary from location to location and from year to year. This result may not be an indicator of results you may obtain as local growing, soil and weather conditions may vary. Growers should evaluate data from multiple locations and years whenever possible.

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