

Research Reveals Non-GMO Genetic Potential

By Josh Richey, Spectrum CEO

"Spectrum has proven to me and our customers that there is no yield loss, or any other economic loss, in the production of Non-GMO corn. We've seen no benefit to planting GMOs."

- Eugene Zimmerman, Spectrum Premium Non-GMO Dealer, Sheldon, WI

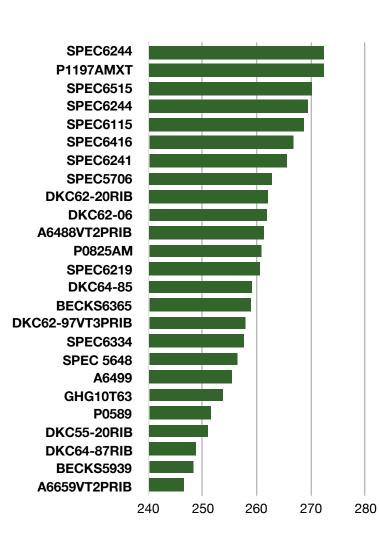
I thought we'd begin this story with a quote from Gene Zimmerman, a Spectrum dealer out of the state of Wisconsin. (You can hear more from Gene in his video segment featured in this issue of the **Non-GMO Network**.) Over a five-year period, Gene, along with another grower, conducted on-farm research testing Non-GMO genetics against GMO genetics. Their findings might surprise a lot of people. "Over the five-year period, we actually averaged a 20 bu/a increase with the Non-GMO genetics. This was not an exclusive study to Spectrum but the Spectrum hybrids followed suit. That's impressive."

One of the reasons Spectrum started the **Non-GMO Network** was to share experiences exactly like Gene's. Experiences that can help Spectrum further define the full potential of a Non-GMO seed program. The truth is, there's still a lot of misconceptions in the industry about the benefits of producing a Non-GMO crop. After appearing at numerous farm shows in 2018, the Spectrum team was surprised by how many growers assumed the only real benefit of Non-GMO seed was the cost itself. "It can't possibly yield like the GMOs, can it?" We truly enjoyed demonstrating that yes, indeed, Non-GMO seed can yield just like a GMO product! (Well, specifically, Spectrum Premium Non-GMO Seed!)

At Spectrum, we have one straightforward mission: to be the best at Non-GMO seed. That's a tall order, to be the best, and we take it seriously. As a result of this determination, we've developed a business that focuses exclusively on Non-GMO seed. Don't mistake this singular focus as an anti-GMO statement but rather a testament to how strongly we believe in the benefits of Non-GMO farming.

In our ongoing pursuit to be the best Non-GMO seed brand, the Spectrum team operates a year-round research program that carefully studies our Non-GMO genetics. In 2018, this program included yield trials of Spectrum Non-GMO genetics against other popular seed brands including AgriGold, Beck's Hybrids, DEKALB®, Golden Harvest, and Pioneer®, to name a few. Trials were conducted in five states by either private cooperators or universities (Purdue, to be exact).

The trials were designed with one primary question in mind: Could Spectrum genetics compete when positioned against genetics from other brands, especially GMO genetics? As a growing company, this question is critical but the answer, even more so.



Non-GMO Genetics Out Pace GMO Genetics

After analyzing all entries, the Top 25 hybrids across all trial locations were identified. The top performing hybrid based upon average yield was Spectrum 6244, a 112-day hybrid that averaged 272.2 bu/a in the trials. This hybrid, for all intents and purposes, tied with Pioneer's popular P1197AMXT which finished at 271.0. While there is no disceranable difference in yield between the two hybrids, the question as to whether or not Spectrum's genetics could compete was answered to our satisfaction.

The second GMO product to break the Top 25 was DEKALB'S DKC62-20RIB with an average trial yield of 262.0 bu/a, placing 9th in the Top 25. On average, the Spectrum 6244 gained 10 bu/a over the DKC62-20RIB.

AgriGold's 6488VT2PRO-RIB cracked the Top 25

with an average trial performance of 261.3 bu/a from this 113-day entry. On average, Spectrum 6244 gained 10.9 bu/a over AgriGold's 6488VT2PRO-RIB.

In the end, Spectrum placed 10 hybrids in the Top 25, seven of those finishing within the Top 10. So, what can we learn from this research?

- Genetic potential demonstrated in yield can be leveraged as we develop new products for the future
- Spectrum's Premium Non-GMO products can compete with the majors regardless of trait
 package. As a result, growers have more flexibility on acres that do not require a prescription
 for insect pressure.
- Exclusive Non-GMO genetic focus is paying off as our products continue to evolve and consistently perform.

As I wrote this article, I realized how rewarding it is to see these results but I know there's more work to be done. For 2019, Spectrum will be expanding its research to go beyond the traditional performance trials. We'll share with you in the coming weeks our plans for 2019 but in the meantime, I'd like to ask you for your input. What would you like to see in our 2019 Research Program? To submit your suggestions, click here.

Finally, I'd be remiss if I didn't share with you the results from my personal farm. This was my second season of exclusively growing Spectrum Premium Non-GMO hybrids. In 2017, my farm averaged 212 bu/a. In 2018, those same acres averaged 233 bu/a. Full disclosure, my ground was blessed with timely precipitation and ideal planting conditions that helped me achieve a 21 bu/a gain. I carefully monitor my acres (with a little help from my partners at Co-Alliance and Pence Group) and was able to manage the year without any insecticide. This is my fourth growing season without insecticide.

Switching to Non-GMO farming has made an incredible difference to my bottom line. I'm living proof that Non-GMO genetics have powerful potential beyond just a cost savings.

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