

Why I Grow Genetically Engineered Crops

This is a sponsored post I wrote for USFRA (US Farmers and Ranchers Alliance). All opinions are my own.

If there is anything that farmers can agree on is the fact that farming practices have changed. Farmers are doing a much better job than years past due to the use of new technologies. And I am speaking about GE technology (Genetically engineered crops).

Before GE Technology

Prior to genetically engineered crop technology (about 25 years ago), I remember driving at night on our rural gravel roads and seeing a “*sea of moths*” in our headlights during the months of July and August. I knew exactly what they were – European Corn Borer moths. I cringed when I saw them because I knew the damage they were causing our corn plants. The corn borer, in its larvae form, caused significant damage to our corn plants by burrowing into the center of the stalk, which then caused weakness in the corn stalk. The corn stalk weakness resulted in 8-10% corn plants toppling to the ground and decreased our corn yields due to insect damage. Harvesting corn that has fallen to the ground is very difficult, if not impossible.

Not only were insects a challenge, but weeds were hard to control as well. Back then, weed control in corn fields were controlled by using concoctions of different herbicides, trying to find the right combination to eliminate each different type of weed. It usually resulted in multiple spraying trips over the fields. Many times our “plan” didn’t work out– mostly because of weather conditions such as rain, wind, temperatures, or the weeds just grew too fast and too big.

In addition to herbicides, we cultivated our fields two to three times per year. Cultivating is like hoeing in-between the rows of plants. If the weeds became too large, we usually succumbed to defeat because we had no other options. We hung our head down and told ourselves . . .

Hopefully, next year will be better.

Better Crop Yields, Less Pesticides

Fast forward to [about 20 years ago](#) when we planted our first genetically engineered crop — Bt (Bacillus thuringiensis) corn. Bt is a protein, found in the soil bacterium naturally. [Bt-corn](#) has the genetic code to produce the Bt protein, which targets a small group of larvae including the Lepidoptera larvae, which is the European Corn Borer. The advantage of using Bt corn is we don’t need to use a full cover insecticide spray, therefore, not killing all insects. And better yet, Bt has been proven to be safe for humans because the human gut and skin lack receptors that can recognize or interact with Bt.

We were excited about its promises and more excited that it *worked!* No longer did we have insects damaging corn plants. Farmers were celebrating this breakthrough technology!



Corn Planter

In addition to Bt-corn, other new GE crops reaching the market were Roundup Ready (RR) corn or RR soybeans. Roundup or glyphosate (herbicide) is very effective at killing plants. When glyphosate is sprayed onto a plant, it is absorbed through the plant tissues (leaves and stems) where it interferes with the production of the enzyme EPSP synthase. This prevents the plant from manufacturing some amino acids essential for life. Roundup works very well on many types of weeds, with the exception of the petunia flower.

In the case of [glyphosate \(Roundup\) resistant plants](#), a gene was taken from a petunia plant (that was naturally resistant to glyphosate) and placed into plants such as corn, soybeans and sugar beets. These GE crops were now resistant to glyphosate or Roundup and it revolutionized weed control.

Today, we apply a pre-planting herbicide and then when our corn is about 12 inches high, we apply one more application of herbicide that includes Roundup and other companion herbicides (to help with weed resistance). The amount we apply is equivalent to less than two soda cans over an acre (an acre is about the size of a football field). It is another four to five weeks before the beginning of visible ear of corn.

That's it. No cultivating, no more spraying.

The biggest benefit we see in using in our genetically engineered crops is we use LESS pesticides and our yields are *better* because of less pressure from insects and weeds. We use fewer resources because we are making fewer trips over the fields. And to me that makes GE technology very sustainable.

GE technology is truly a win for the environment, our soils and ourselves.

As a farmer, we are continually looking for ways to be more *environmentally friendly* while enhancing our crops.

And this is why I grow GE crops.

[Is it Safe to Feed My Family GMOS?](#)

print



Please follow and like us:

Like this:

Like Loading...