For Release 05/16/16 Phone: 785/537-6350 Fax: 785/537-6353

GMOs

I don't know if it is fair to classify me as pro GMO, but I'm pretty confident that some folks who are anti GMO would put me in that box. In truth, for personal consumption, I don't care. I'm not afraid of genetically engineered crops, and I don't mind eating organically grown crops either. In my mind, they are the same.

At the McClure farm, the garden gets fertilized with composted sheep manure. That sounds organic, but it wouldn't pass organic certification standards because the sheep consumed conventionally grown hay and grain at some point in their life. But, that's not why we fertilize with manure. We use it because we have it, not because we are afraid of commercial fertilizers.

The bottom line for me is that I like to eat. I eat lots of things that aren't necessarily good for me,... and it's not because of how they were grown. Even that bag of potato chips on my desk that I've been munching on all morning wouldn't be so bad if I would just get out and walk five miles over the lunch hour. But, that's a story for the Family and Consumer Sciences Agent. I want to talk about GMOs

The first thing we need to do is to define GMO. GMO stands for Genetically Modified Organism and refers to an organism in which the genetic material (DNA) has been altered in a way that does not occur naturally. Genetically Engineered is also a good term, and refers to the same type of plants.

So, the deal with genetically engineered crops is that scientists have figured out a way to

insert a trait from one plant into another without taking the pollen from one and crossing it with another. By taking just the one good trait and inserting it into another plant they like, they avoid having to take lots of bad traits with the good and then trying to breed them out of a plant. At least that's the way it works in my simplistic mind.

There are currently eight GMO crops bring grown in the United States. They are: corn, soybeans, cotton, sugar beets, canola, alfalfa, papaya, and squash. If you think you haven't been consuming products from genetically engineered crops for years, then you may not know that 92% of the corn, 94% of soybeans, 95% of sugar beets, and 90% of canola grown in the United States is GMO. Somewhere between 70% and 80% of food ingredients contain some form of GMO crop.

So, what traits are scientists inserting into crops? The first GMO crop was Bt corn. Bt is a naturally occurring soil bacterium that has been used for years as an organic pesticide. Bt is short for Bacillus thuringiensis. By inserting the Bt trait into corn, that corn now has resistance to corn borers, and insecticides aren't needed for corn borer control. Bt cotton is also on the market and widely used.

The other common trait inserted into many crops is glyphosate resistance. Glyphosate is a non-selective herbicide that kills most plants to which it is applied. However, GMO crops with glyphosate resistance have been given a trait that allows them to survive, and not miss a beat, when sprayed with glyphosate. Now, producers can spray with glyphosate to kill weeds and not damage their glyphosate resistant corn, soybeans, or cotton.

So, are GMOs good or bad? I'll go on record as saying they're not bad. But, you can eat whatever you want as long as you don't tell me what to eat. Right now, I'm going to finish this bag of chips, then run over to Taco Bell for some more cheap food.

Wheat Plot Tour – May 26, 2016

We don't even have GMO wheat, so it doesn't tie in with today's topic at all, but here it is. The Riley County wheat plot tour will be held at 6:30 p.m. on Thursday, May 26 on land farmed by Ronnie and Roger Nelson. The plot is located 5 miles north of Randolph, 2 miles east on Rose Hill Road, then 5/8 mile north on Halls Ravine Road.

Reservations for the wheat plot tour are requested by Tuesday, May 24 and can be made online at <u>www.riley.ksu.edu</u>. There is a free supper, so we need to know you are coming.

If you have questions, or if you just prefer to make a phone call instead of registering online, you can reach me at the Riley County Extension Office at 785/537-6350.

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