View from the farm: Why conventional and organic farmers don't want to save seeds

I live and farm with my boyfriend, a fifth generation farmer, on a 2,000-acre farm in Northeast Iowa. Together, we raise sheep and beef cattle and grow oats, alfalfa, GMO corn and soybeans.

As farmers, I think we've heard it all. In today's day and age, less than 2% of the population of North America are farmers. Compare that to 1930 when 21% were (and the population was much smaller) and it's easy to understand today's disconnect between farmers and consumers. The vast majority of people are generations removed from the farm.

Given that such a small number of people actually produce the food we eat, it can be easy for farmers' voices to get lost in the media shuffle. When trying to look up information on modern farming practices, it can be very difficult to decipher fact from fiction. That is why I started my blog, <u>Farm Babe</u>, to educate people on modern farming practices—what we do and why we do it. And, a lot of times, farmers today are left shaking our heads, wondering where people come up with this stuff, the myths surrounding GMOs.

I'd like to address one today, and that is the myth about seed saving. I've heard time and time again that conventional farmers are forced to grow GMO crops, and companies like Monsanto twist farmers arms with corporate control and don't let any farmers who buy their seeds, GMO and conventional, save them—and that includes organic farmers, many of whom buy their seeds from large agricultural companies.

Here's just one of thousands of headlined examples on the web from advocacy media or NGO sites—and sadly even from some reputable media–that present this misinformation as fact.

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Yes, the "rules of the game" have changed, but it is not because of Big Bad Ag. It is true that farmers who buy patented seeds, used by organic and conventional farmers alike, sign technology agreements and agree we won't save seeds, however this is not a problem for farmers today because saving seeds hasn't been popular since the 1930's. In the 1920s, a farm family could typically pick an acre a day. They'd pick it, husk it, and throw it in the wagon. Farmers would pick the best ears and save them for seeds. But there wasn't a lot of genetic variety and, the traits did not breed true; farmers were lucky to get 25 or 30 bushels an acre of quality, sellable corn. (A bushel is fifty-six pounds of corn grain.)

Ricture found or type unknown An early 1930's corn wagon

In the early 1930's, the first hybrid corn seeds became available. GMO hybrid corn seeds hit the market in 1996. Today, using patented hybrid seeds (most of which are genetically modified but many of which are sold to organic farmers) that have to be purchased each year, the average US corn farmer yields 168.4 bushels/acre, and many farmers top 200, according to the USDA.

There are a variety of reasons why modern farmers in the United States, Europe and most developed

countries do not save seeds. In general, today's farms are so much bigger than they used to be. The economy of scale makes absolutely no sense to save seeds. It's expensive, time consuming, and there's many genetic varieties; saving seeds does not guarantee germination.

Farmers are business people. We would never buy hybrid seeds each year if the extra cost was not more than made up by the returns for selling truer bred, higher quality corn. And we are not bound to any one seed company as each purchase is just for that use year. Today, when choosing seeds, we work with seed reps and crop advisors to make decisions. We have hundreds of seed companies to choose from and thousands of different varieties. It is not uncommon to plant five or six different varieties, often made by different companies, on one farm. On ours, we plant four different crops and 750 acres of that is corn alone.

We plant about 35,000 seeds on one acre, which yields over 200 bushels today. If you do the math, this is nearly 27,000,000 seeds. Do you want to figure out how to save 27 million seeds? I didn't think so. Who has time for that?

More importantly, when we work with seed reps, the advice we get is extremely helpful. There are so many factors when choosing the right seeds. Previous crop, (we rotate, us no-till methods, cover crops) climate, soil type, time to maturity, (harvest time) expected rainfall, etc. If and when we fill an order, these seeds come with warranties and money-back guarantees. We want the technology. We want better yields. We want guaranteed germination.

Picture1

Image not found or type unknown Improved corn yields with better genetics

Another benefit to buying seeds is the quality assurance and uniformity. Every seed goes through a long

and complicated process, which guarantees uniformity for our planters and equipment. Every part of our planter is attached to a sensor during planting. If one of the seeds is slightly off, it will not drop the seed and it will notify us in our tractor cabs on the computer screen if something is wrong.

Then it comes down to harvest. Have you ever noticed when you look at a cornfield, every plant looks about the same? Uniformity, the same height, the ear placement and size, the same stand, everything is precise. Everything is guaranteed. Everything is uniform to ensure a smooth harvest through the combine and equipment. Every crop goes through levels of quality and inspection before it can be sold so this is is very important. When you use old seeds, this does not happen and the chances of them even germinating are not very good.

Picture1

Image not found or type unknown A typical cornfield in 2015. Notice the uniformity and germination

Some activists have turned criticism of farmers who save seeds into a cult. Vandana Shiva, the Indian philosopher who opposes modern technology in farming, is particularly critical. "The desire to save seeds comes from an ethical urge to defend life's evolution," <u>she writes</u> on her web page. Yet farmers in developing countries are rapidly abandon seed saving because the benefits—higher yields—far exceed the marginal extra yearly cost of buying more reliable patented seeds. And with the adoption rate increasing, and after years of stagnation, yields are finally growing.

In conclusion, within the farming world it is very easy for us to see the need to purchase new seeds every year. It's no different whether you farm organically or conventionally. We want the technology, we like working with seed reps and we value the expert advice. If we all saved seeds, they wouldn't germinate; this would make planting and harvesting a nightmare. Our yields would be far worse than they are today. No one has the time and energy to sit and save tens of millions of seeds each year; it makes no sense. Hopefully this helps more people understand the myth of saving seeds and why this has not been popular in over eighty years. Quality, germination, uniformity, and technology are all very important necessities for today's modern farm.

To learn more about why farmers plant GMOs, read my other article here: <u>If you care about the future of</u> our planet, here's why you should support GMOs

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