

United State Department of Agriculture
Advisory Committee on Biotechnology & 21st Century Agriculture

Comments of:
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Hanover, Virginia

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Mr. Chairman and Members of the Committee,

My name is Kevin W. Engel, owner and operator of Engel Family Farms in Hanover, Virginia.

My comments today are on behalf of the Virginia Farm Bureau Federation and my fellow producer members across the state and country that feed, fuel and clothe the world.

Those that know me are already aware that other than actually farming, my favorite past time is talking about agriculture and its future. I am known to discuss it with anyone I meet for hours and hours. You are in luck; I am only allotted five minutes for my comments today!

Even though we only have a few minutes I greatly appreciate the opportunity to share with you my thoughts regarding biotechnology, coexistence, and compensation. I have provided written comments for the record.

Engel Family Farms currently consists of 16 thousand acres of land primarily devoted to premium grain production (barley, corn, soybeans, and wheat). While others are producing commodities for market prices, Engel Family Farms produces high quality grain for premium prices. Our business model utilizes mobility, technology, geographic diversity, scale, and niche

marketing to produce value added results. To achieve our goals we are heavily invested in truck transportation, current model equipment, irrigation, and seeds that produced the desired results. Twenty-six family members and staff make our operation a success each day. Our operation extends through two states (VA and NC) including 15 local governments and 91 landowners. Because of our emphasis on diversity and premium markets, we grow several different varieties, including organic and non-GMO, and we know firsthand the coexistence practices required to effectively manage risk, protect our crops, and reap the benefits of our hard work.

In Virginia, as in rest of the country, GMO has become conventional and farmers everywhere are making choices that demonstrate the economic benefit of this safe and environmentally sound technology. In Virginia 421,000 corn acres contain GMO varieties (86% of the total crop), up 10% from 2009. Increased GMO usage is the result of a 28% increase in the use of Stacked varieties (Varieties that contain multiple GMO traits). Stacked varieties represent 36% of Virginia planted corn; herbicide tolerant only 30% and insect resistance only is 20%.

Our soybean crop is 524,000 acres GMO varieties (herbicide-tolerant). This adoption rate is 92% and is up 6% from 2009. Other crops include 104,000 (90%) cotton acres contain GMO varieties. While total GMO usage has remained relatively constant in cotton, Stacked variety usage has increased 16% since 2009 to 57% of Virginia's cotton acreage at the expense of single trait GMO varieties (both herbicide tolerance and insect resistance) as well as new adoption of GMO technology. Herbicide tolerant only varieties now account for 21% of Virginia cotton and Insect-resistance accounts for only 16%.

As you can see, my fellow farmers in Virginia and I are very dependent on biotechnology to gain production advantages from herbicide tolerance and pest resistance to address weed, insect and disease control.

Like most farmers, I believe we should have the ability and right to choose the cropping method we deem to be in our own interest, and accept the associated stewardship practices necessary to protect the integrity of our crop and fulfill our own marketing obligations, without infringing on the rights of other farmers to practice legal, environmentally safe, and longstanding, accepted practices on our own property. The majority of farmers and consumers continue to vote for GMO in the marketplace, but a segment of society still seems too quick to view technology or biotechnology, which has been reviewed and approved by our regulatory agencies, as something to be feared. Part of my operation is the production of food grade corn and soybeans for domestic and foreign use. This is primarily a result of my ability to irrigate and deliver quality grain when it is needed. Early on flour millers required non-GMO food grade white corn. Each year a significant amount of my production was rejected for insect, wildlife and disease damage. The non-GMO variety did not cover the ear entirely leaving a significant portion exposed to damage and disease. I, along with my seed representative, met with the millers to understand the basis for the non-GMO requirement. We were able to determine that the requirement was not based on science or contract, but simply based on caution and public relations. It is this type of industry dialog that is used effectively by farmers and agribusinesses everyday to solve marketing concerns.

I believe the recommendations of this committee and actions of our government to intervene in markets must be based on facts and the appropriate cost benefit analysis. If based on fear or public relations our economy and industry will be subject to the whim of other nations. Along with other Virginia farmers, I have produce non-GMO food grade soybeans for utilization in foreign markets. We can produce higher yields and quality with GMO seeds and methods. Extensive analysis continues to show no traces of herbicide remaining in the crop. Additionally, when I use continuous no-till systems my margin grows significantly in fuel cost savings alone. It is this type of economic and environmental benefit that makes our farmers the most productive and sustainable in the world, and we should be very careful not to discourage or undermine the innovation that makes that possible.

Regarding compensation, I believe it is unclear or practically impossible to determine who is being harmed by GMO use and therefore impossible to determine who pays. I sold part of a farm in North Carolina to an organic producer. While he may be concerned about coexistence from the cross-pollination viewpoint, I am concerned about coexistence from a weed, insect, and disease viewpoint. I am not old enough to have experienced a pure strain of any of the crops I grow. They are all hybrids that have been bred to provide desirable traits. I also know that outside of an air tight green house it is nearly impossible to detect the actual origin of cross contamination. Each year, I spend a considerable amount of money on stacked or multiple traits. It is possible that pollen from my neighbor's crop may cause undesirable traits to appear in my GMO crop. In my case in North Carolina we have solved the issue of coexistence by truly acting as neighbors with common sense and courtesy. We simply communicate and take extra care to be sure we minimize our effect on each other. I am not comfortable that an equitable

compensation formula can be developed or fairly implemented without undermining this spirit of neighborly coexistence, nor if it is the appropriate role of government to do so. It is difficult if not impossible to legislate or regulate to achieve fairness and common sense.

I am also concerned about unintended consequences regarding this subject. The most glaring is the perception of US agriculture production domestically and of our trading partners around the world. It is a worrying precedent for public policy in the US to implicitly favor one type of cropping method and marketing preference without a scientific basis or public safety interest. If we continue the public relation self-degradation of our food and fiber crops there is no reason for confidence from anyone else.

Mr. Chairman, to be clear, I am an organic producer as well. I have a landowner who has chosen to raise organic vegetables on 40 acres of 270-acre tract. She continues to lease me the balance of the tract for maintenance purposes but requires that I raise my grain on the tract organically as well. To date the weed control remains at 98% primarily due to the 15 years of GMO (herbicide tolerant) cropping before organic certification and subsequent heavy tillage. On the slopes of Albemarle County, just outside of Charlottesville, Virginia, it remains to be seen if that type of tillage is sustainable economically and environmentally. A majority of my operation is in the Chesapeake Bay watershed and therefore covered by the watershed's Total Maximum Daily Load and the associated watershed implementation plan. Those plans are heavily dependent on continuous no-till and other practices that are GMO dependent due to weed pressure. I am experiencing first hand the conflict between water quality and organic farming. I deal every day

with these types of tradeoffs and, like all farmers, I understand that I must work hard to coexist with my neighbors and accept the risk and reward of my own cropping decisions.

Mr. Chairman, thank you for allowing me to provide comments here today on behalf of Farm Bureau. My comments are also the result of my longstanding activity in the following associations and their national affiliates: the Virginia Grain Producers Association, the Virginia Soybean Association, the Virginia Crop Improvement Association, and the Virginia Agribusiness Council.

Thank You.