

**Prepared Testimony of  
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Senate Committee on the Judiciary Hearing on  
“Consolidation and Competition in the U.S. Seed and Agrochemical Industry.”  
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Good morning, Chairman Grassley, Ranking Member Leahy, and Members of the Senate Committee on the Judiciary. Thank you for the opportunity to discuss our company’s views on the topic of “Consolidation and Competition in the U.S. Seed and Agrochemical Industry.” I serve as Monsanto’s Executive Vice President and Chief Technology Officer and I am pleased to be here today.

We are witnessing a new era in agriculture as a result of advances in biology and data science. Silicon Valley is digitizing farming around the world. And breakthroughs like gene editing are opening up a whole new world of possibilities in plant biology.

These advances are urgently needed to address major challenges facing society, as we must:

- Feed 10 billion people by 2050
- Mitigate the impact of climate change
- Improve sustainability to produce more with less
- Help increase the efficiency and productivity of farmers

Fortunately, the pace of innovation is accelerating, and new tools and applications are creating a healthy disruption in agriculture. This should not be a surprise, as we live in a world where Google is able to pivot from its traditional space and build a driver-less car... and Amazon is developing a rocket ship! Agriculture can and should similarly embrace these revolutionary technologies.

As someone who grew up on a small family farm in Illinois, I understand that change can be unsettling to farmers. But our industry *is* changing...and it needs to... because the solutions we need can only come if companies embrace new technology, increase their investments, and accelerate research and development (R&D). And *that’s* why you are seeing the latest round of mergers right now.

Why is that the case? It’s fairly simple. Fifteen years ago, we spent \$300 million on R&D. Today we spend \$1.5 billion. That sounds like a big number. But compare that against other data and life science companies like Microsoft, Apple, Pfizer and Merck who each invest over \$10 billion per year in R&D. To realize a step-change, agricultural companies will need to invest more if we expect to deliver what farmers need and do it faster.

Monsanto and Bayer are aiming for that goal. We are bringing together two very different businesses with complementary technologies and minimal overlap. Monsanto's expertise in seeds, traits, and data science -- combined with Bayer's crop chemistry portfolio -- will strengthen R&D and create new pathways to innovation.

As the Chief Technology Officer, I am proud of Monsanto's record of innovation -- stretching from the early days of biotechnology to our new pioneering investments in precision agriculture, digital farming and understanding of the soil microbiome... *and it won't stop there... there is so much more to do!*

I spend a lot of time in the field talking with farmers... and if there is one message that I would like them to hear today, it is that we are listening and we are committed to you. You will *continue* to enjoy the products and choices you have today. Our innovation will continue to be broadly licensed so that you can buy the newest products from the suppliers that you choose. And competition will increase.

I say this as one farmer to another -- we understand we have to earn your business each and every season... and we can only do that if we bring real value to your farm through our constant innovation every spring!

The bottom line is that our industry is undergoing a healthy and sorely needed transformation. We understand the concerns about consolidation -- which we will hear more about today. But you must also put it in context, as this type of change enables more innovation and delivers better products to the farm even faster. Farmers are best served when companies invest more in new technologies and accelerate the pace of their R&D, which in turn spurs robust competition.

I want to thank the Committee for bringing us together today. I hope we can really get to the heart of what farmers need. Times are really tough right now in agriculture. We are all feeling it. But from my experience, the answer is innovation. Innovation drives competition. Innovation strengthens the farming economy. And innovation lifts our society and improves the environment.

For our farmer customers that are watching today, we hope you are as excited as we are about the future, as we work together to meet the tremendous challenges in front of us.

Thank you.