

Written Testimony

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Pressure Cooker: Competition Issues in the Seed & Fertilizer Industries
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Thank you, Chairman Grassley, Ranking Member Durbin, and members of the Committee for the opportunity to provide testimony during today's hearing. My name is Andy LaVigne, and I am honored to appear before you today in my role as President and CEO of the American Seed Trade Association (ASTA).

BACKGROUND

Founded in 1883, ASTA is one of the oldest trade organizations in the United States. Its membership consists of nearly 700 companies involved in seed production and distribution, plant breeding, biotechnology, and related industries in North America. ASTA is the leading voice, representing the U.S. seed sector, on the research, development, marketing, and movement of seed throughout the world. ASTA members produce better seed to grow better crops for a better quality of life. From alfalfa to zucchini, and from conventional to organic to biotechnology seed production systems, our membership includes a wide range of seed producers. In fact, ninety-five percent of ASTA's active members are small businesses as defined by the Small Business Administration.

Seed producers are proud of their role as the first step in the agriculture value chain that feeds, fuels, and clothes our world. Season after season, our members provide high-quality seed choices for farmers, providing the foundation for a bountiful harvest.

As part of their production planning, each planting season farmers choose seeds improved through plant breeding, biotechnology, and seed treatments. Our members' investment ensures that farmers have access to reliable, resilient seed varieties tailored to local growing conditions, helping to reduce risk and boost crop productivity. By supporting farmers at the start of the production cycle, seed producers strengthen rural economies, contribute to national food security, and help American farmers remain the most productive in the world.

SEED PRODUCTION

The development and production of seed begins with advanced research and breeding programs, proceeds with production practices ranging from large-scale crops to hand-

pollinated varieties, moves to the harvest of the seed crops, and concludes with conditioning, treatment, and testing of seed quality and purity prior to commercial sale.

The process from research to final sale may take place in multiple countries, as companies rely on different regions' climates and leverage multiple growing seasons per year to accelerate the rate of both research and seed production activities.

Even with this highly efficient and optimized process, it can take 8 to 10 years to commercialize new, improved seeds. In many cases, seed companies, informed by their customers' needs and trends in the food value chain, begin to develop new breeding strategies years in advance of anticipated seed production and sale. Plant breeding and seed improvement is an ongoing, iterative process that continually responds to shifting market demands, broader economic conditions, environmental fluctuations, and evolving agricultural pests and plant diseases.

In addition to their investments in research, development, and production, seed companies developing biotech seed also bear the costs of domestic and international regulatory compliance. A study in 2022 estimates the cost and time of bringing a biotech variety to market at roughly \$115 million and over 16 years.¹ Almost 40 percent of the cost is tied to regulatory compliance, a tremendous barrier to entry for small and medium sized businesses as well as for biotech varieties in smaller acreage crops, where the differences in economies of scale make it harder to recoup the investment.

In export markets, particularly for the subset of biotech crops, the seed industry faces severe constraints posed by non-tariff trade barriers, including countries that deliberately use their regulatory system to stymie American seed innovation.

The U.S. seed sector has a long history of successfully delivering seed choice and ensuring seed performance for America's farmers, gardeners, and landscape managers, ensuring the best seed is available to meet the needs of the wide range of environments, soil types, and management practices. Just like other agricultural producers, seed producers shoulder the same pressures of inflation and other macroeconomic drivers. Those factors increase costs along the value chain – from inputs, to labor, to transportation, to land.

Furthermore, seed companies often make seed planting and production decisions two or more growing seasons in advance of seed sales. Despite the long lead time of seed

¹ AgbioInvestor, “*Time and Cost: A Study on the Discovery, Development and Authorisation of a New Biotechnology-derived Genetic Trait*,” April 2022, accessed via “AgbioInvestor–CropLife International – Trait R&D Study,” CropLife International, <https://croplife.org/wp-content/uploads/2022/05/AgbioInvestor-Trait-RD-Branded-Report-Final-20220512.pdf>. (croplife.org)

production, our members have consistently met the evolving needs of their farmer customers by offering choice in seed.

Across all varieties, international trade and global movement of seed is critical to the U.S. seed industry to efficiently develop and commercialize improved varieties for U.S. farmers. The continued escalation of tariffs on seed poses a unique challenge. Tomato seed, for example, can cross 6 or 7 different international borders from R&D to multiplication to cleaning and packaging before it is sold to farmers. For each crossing, a tariff may be levied on that same seed, burdening the seed producer multiple times. Those costs are highly significant and disproportionately hurt small businesses in the U.S. seed sector.

OPPORTUNITIES FOR THE FUTURE

Our industry believes there is a path forward to alleviate some of the pressures that both farmers and seed producers currently face.

First, ASTA, in partnership with other associations and the U.S. government, is advocating both domestically and internationally for risk-proportionate, science-based regulatory reform. Reforms should right-size regulatory compliance processes and their associated costs for companies of all sizes. Our advocacy applies to biotech crops, and just as importantly to applications of plant breeding innovation. Reform is needed to ensure that the rapid pace of scientific innovation is not hampered by unjustified regulatory barriers.

Modernizing policies and reforming regulatory approaches both in the U.S. and foreign markets can reduce these unjustified barriers to entry. With fewer roadblocks comes greater innovation, enabling growth of new seed companies as well as growth and diversification of improved seeds commercially available and accessible to U.S. farmers.

Second, the United States has a long history and tradition of entrepreneurship founded on successful systems of technology transfer from the public sector to the private sector. Decades of public and private research, including USDA Economic Research Service studies, show that genetic improvements in seed have been a key driver of yield gains. The global competitiveness of the U.S. seed sector, farmers, and food value chain is built on sustained investment in U.S. public sector research, including investments in our land grant universities, research institutions, and the USDA. This public investment is complemented by private sector investment. On average, ASTA's members reinvest substantial portions of annual revenue in research, development, and production, enabling continuous innovation and genetic improvement in seed and plant varieties.

Especially true for low acreage crops, public and private partnerships are essential in deploying the strengths of both sectors to bring improved varieties to the marketplace. Strong intellectual property protection encourages investment in new products and promotes continued innovation that has been critical to improving seed to support on-farm resilience in recent years.

Seed producers work tirelessly to provide farmers access to the most innovative seed to increase yield, combat pests and disease, address environmental challenges, and meet consumer demand. The expertise and innovation generated by our member companies drive agricultural progress, including through investment in rural communities to spur economic development. We recognize the important role we serve supporting American farmers in providing for a growing global population and a more prosperous America. Working with our farmer partners in the field, and informing science-based, risk-proportionate policies that unleash American innovation, the U.S. seed sector is up to the task.

CONCLUSION

From seed to table, the entire agricultural value chain is navigating pressures from the brunt of inflation and economic uncertainty. We know that farmers are weathering these challenges head-on to continue to feed, fuel, and clothe the world. Facing these same challenges, seed producers are committed to delivering the high-quality, professionally produced seed U.S. farmers expect, season after season. When farmers and other growers buy a bag of seed, they are investing in yield potential, resilience to pests and weather, and the ability to produce more with less. They are investing in better seed for better crops for a better quality of life.

Thank you, Chairman Grassley and Ranking Member Durbin, for the invitation to speak today on behalf of America's seed producers. I am happy to answer any questions you and other members of the Committee might have.