Senate Judiciary Committee Hearing
"Pressure Cooker: Competition Issues in the Seed & Fertilizer Industries"
Andrew LaVigne
Questions for the Record

QUESTIONS FROM SENATOR GRASSLEY

1. Where have the promised efficiencies from consolidation shown up for growers - lower prices, better yields or better service?

   ASTA's mission is to contribute to the success of U.S. farmers, global agriculture, and food security by creating an environment where each ASTA member company has the opportunity to build an innovative, economically sustainable, and successful business. ASTA is not involved in the individual business transactions, structures, or strategies of its members. As a trade association, we work to address premarket and precompetitive issues on behalf of the entire U.S. seed sector.

2. Should Congress require disclosure or similar "sunshine' rules," such as in the healthcare industry, so growers can determine when dealer incentives may be influencing product recommendations?

   ASTA is not aware of any specific bills or proposals on this issue relevant to the seed sector. ASTA would be pleased to review any specific proposals and meet with your staff to discuss them as appropriate.

3. What specific license clauses or stack dependencies keep royalties flowing on supposedly off patent traits, and what straightforward and clear disclosures should farmers see on invoices to know what they're paying for?

   ASTA supports a strong intellectual property system that enables innovation in the seed sector and has worked to develop the AgAccord, a predictable and transparent mechanism to address patent expiration for agricultural biotechnology events. More information about the AgAccord is available here: https://www.agaccord.org/?p=about. For additional information, please see the response to Question 1.

4. Will you commit to itemized invoices, seed price vs. trait/tech fees, so an Iowa farmer can compare a 2025 hybrid across brands apples-to-apples?

   Please see the response to Question 1.

5. Intellectual property fees reportedly account for 50% to 70% of the cost of corn seed. Are you confident of the validity of all of the patents used to justify these royalty fees that farmers and smaller seed companies pay?

   Please see the response to Question 3.

6. Does ASTA receive any funding from the USDA, and if so, how much?

   ASTA is a proud to partner with USDA as one of the over 70 U.S. Market Development Program Cooperators. Through these cooperator programs, ASTA organizes food- and agriculture-focused trade promotion activities to help U.S. exporters develop and maintain international markets for seeds. This work is consistent with ASTA's goals to build export opportunities for U.S. seeds, ensure the U.S. seed sector is represented in international trade shows and policy discussions impacting our industry, and address regulatory and trade barriers that prevent the commercialization of improved seed varieties.

   ASTA currently receives cooperator funds under several USDA programs, including the Market Access Program (MAP), the Foreign Market Development (FMD) program, and the Regional Agricultural Promotion Program (RAPP). The funding levels that ASTA receives from USDA for these programs varies by program type and program year. Over the past three years, ASTA has received an annualized value of approximately $1-1.2 million per calendar year.

7. Will you support the recent Memorandum of Understanding between USDA and the DOJ that is intended to ensure agricultural producers, independent seed companies, and agricultural retailers are treated fairly?

   ASTA strongly supports efforts by federal government agencies to cooperate with one another and promote efficiency in using government resources.

8. With respect to ASTA's revenue from its member companies, which member companies are the three largest contributors to ASTA's revenue?

   ASTA maintains a publicly available membership application for members of the seed

sector wishing to join with ASTA in advancing its mission of being "an effective voice of action in all matters concerning the development, marketing and movement of seed… throughout the world. ASTA promotes the development of better seed to produce better crops for a better quality of life." The application, which sets out ASTA's dues structure, is available at https://www.betterseed.org/wp-content/uploads/Updated-ASTA-Membership-Application-February-2024.pdf.

QUESTIONS FROM SENATOR BOOKER

1. What impacts have President Trump's new tariff policies had on your association's members?
    a. In the short term, how have these tariffs affected your members' operations, costs, and competitiveness?
    b. Looking ahead, what long-term consequences do you anticipate these policies will have for your industry and its global position?

The U.S. agriculture sector is among the most innovative in the world, because the U.S. seed sector uses a combination of innovative technologies and seed trade to speed the development of new crop varieties for farmers. U.S. seed subsequently serves as the foundation for hundreds of billions of dollars in U.S. agricultural exports into over 100 markets. In 2024, the $1.7 billion in total U.S. seed exports and $1.1 billion in total U.S. seed imports represented a small fraction of the U.S. trade balance, resulting in a trade surplus for the U.S. seed industry with more exports than imports. Yet, over the same timeframe, U.S. exports of agricultural goods that depend on the seed industry were valued at $179 billion, and the U.S. agricultural sector was estimated to support $9.5 trillion in economic value and 1 million American jobs.

Unlike other agricultural goods, which are exported primarily for immediate use or processing in food and feed, the seed sector relies on trade for commercial sales, seed production, and as a fundamental step of years-long research and development (R&D) pipelines. For example, counter seasonal production of seed in warmer locations during U.S. winter months allows the sector to complete additional breeding cycles; and seed production in specific environments that are free from pests and diseases ensures the cleanest seeds reach U.S. farmers. In certain cases, crops might even require certain weather or hours of sunlight to trigger plants to flower — and thus produce seeds. These processes can require movement of seed between as many as six or seven countries throughout the R&D lifecycle before a seed is sold to a farmer.

ASTA and our members are already reporting significant increases in costs associated with tariffs. Tariffs have been assessed at $300,000 on single shipments, and many ASTA

members are anticipating several million dollars in additional expenditure per company before the end of the 2025 calendar year alone. As an industry that operates at the top of the agricultural value chain with low margins and low trade volumes, those costs are highly significant. Many small businesses in the U.S. seed sector cannot continue operations at those costs. This will mean less research and development (R&D) within the United States, fewer planting choices, and potentially higher prices for U.S. farmers.

Furthermore, decreases in seed imports could cripple U.S. companies that provide technology-intensive seed processing and conditioning services that ensure maximum seed performance for farmers. If these businesses are forced to close or relocate due to costs, these services will no longer exist within the United States. Estimated yield losses without these services in certain U.S. vegetable crops could reach 80-100 percent, which would significantly harm U.S. farmers and consumers. Elimination of tariffs on seed movement remains a top priority for ASTA and our members. The current tariff rates on many U.S. trading partners threaten U.S. competitiveness, productivity, and technological leadership in the seed sector.

2. In your written testimony, you reference a 2022 study indicating that it costs approximately $115 million and over 16 years to bring a biotech seed variety to market, with nearly 40 percent of that cost, about $46 million, attributable to regulatory compliance.
    a. In your view, which regulations are the most burdensome and do not provide a net benefit to consumers?
    b. Can you provide examples of how regulations create barriers to entry for small and medium-sized businesses? Do these barriers include cost-related challenges?

The full report, *Time and Cost to Develop a New GM Trait*, can be found at https://croplife.org/wp-content/uploads/2022/05/AgbioInvestor-Trait-RD-Branded-Report-Final-20220512.pdf. Biotech seed developers must meet U.S. regulatory compliance for biotech crops intended to be cultivated in the U.S. In addition, to facilitate trade of harvested products, biotech seed developers also must navigate regulatory compliance in major importing countries. Aside from the U.S. EPA, most regulatory agencies in the U.S. and around the world do not charge a fee for biotech crop approval applications. The cost of regulatory compliance comes from the scientific regulatory data that must be generated, and the amount of time the regulatory and approval processes take. In some countries, seed companies can only submit applications for approval after the biotech crop has been approved in the U.S. This creates unnecessary asynchrony between approvals and delays U.S. farmers access to new biotech traits.

One biotech product's regulatory data package may be reviewed by several regulatory agencies globally, each operating on its own timeline and often with varying data requirements. In the last three decades of biotech crop usage, these repetitive reviews, especially in the case of food and feed safety, do not provide a net benefit to consumers in the U.S. or around the globe.

3. To address the pressures that farmers and seed producers currently face, you propose "right-siz[ing] regulatory compliance processes."
    a. Would this approach involve tailoring regulations based on specific business characteristics, such as size or crop type?
    b. Can you provide examples of some of these reforms?

Rightsizing regulatory compliance should be based on regulatory experiences, the latest scientific information, and applying the concept of risk-proportionality. Regardless of the size of the company or the crop type, biotech seed developers benefit from consistent, predictable, and durable regulatory decision making. With regards to biotech crops, the USDA, the EPA, and the FDA need to reduce duplicative reviews and enhance coordination. ASTA has made substantive comments over the last several years in each Administration's regulatory streamlining efforts. We support language in the Committee passed Farm, Food, and National Security Act of 2024 (H.R. 8467) that clarifies EPA's regulatory scope and removes excessive regulatory burdens for plant breeders.

4. In your view, can the United States remain competitive without investment in public-sector research? What do you think would happen if we relied solely on the private research sector for innovation and seed improvement?

The global competitiveness of the U.S. seed sector, U.S. farmers, and the domestic 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.

ASTA strongly supports robust and sustained investment in public sector research. Adequate research and development funding for U.S. agencies, particularly programs and initiatives within USDA, is essential for maintaining the United States' position as a world leader in agricultural innovation and seed technologies. For example, consistent funding of the USDA National Plant Germplasm System (NPGS) is extremely important for the U.S. seed sector. The NPGS serves as the U.S. gene bank for all crops and wild relatives, allowing any public or private research scientist to access varieties used in breeding and agricultural production. The true value of the NPGS goes beyond merely storage for specimens. As a dynamic, living seed bank, the NPGS serves as an

unparalleled source where U.S. farmers, companies, and researchers can request access to diverse plant materials at any time, thus powering innovation through plant breeding, research, and public-private partnerships. Research using NPGS collections has directly increased U.S. farmers' income and livelihoods through the development of innovative seeds and crops that are used by farmers every day. Additionally, the seed sector relies on a functioning NPGS to deposit seeds, which is a condition for receiving intellectual property rights under Plant Variety Protection (PVP), and to access varieties once they are no longer under protection.

There are numerous other examples where innovation in smaller acreage crops, vegetables, and fruit have depended on public sector research and investment. For example, Tasti-Lee tomato is the best-selling field round tomato in the U.S., and it is a hybrid produced by a private seed company from parents bred at the University of Florida with funding from growers. Lettuce is one of the most widely-consumed vegetables in the U.S., and is produced year round in California and Arizona. Scientists at the University of California Davis (UC Davis) and the ARS Crop Improvement and Protection Research Unit are collaborating to develop and release varieties and breeding lines for the private sector, with critical resistance to diseases. Finally, through a partnership with USDA, several leading academic institutions and Plant Sciences, Inc. (PSI), an agricultural research company, will study Rubus, or caneberry crops, and identify natural variation for future breeding and gene editing opportunities. Scientists and researchers from Pairwise, PSI, the University of Arkansas, the USDA Agricultural Research Service (ARS) in Corvallis, Oregon, Cornell University and North Carolina State University, will collaborate to identify and characterize the genetic diversity in blackberries, red raspberries and black raspberries as well as multiple wild caneberry species such as salmon and thimble berries.