Testimony of
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Legislative Hearing on "Past Breakthroughs and Future Innovations in Crop Production"

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Good morning, Chairman Thompson, Ranking Member Craig, and Members of the Committee.

Thank you for the opportunity to appear before you today to discuss emerging innovations in crop production. My name is Karl Wyant, and I serve as Director of Agronomy at Nutrien. It is an honor to speak on behalf of growers, agribusinesses, and researchers who are at the forefront of advancing sustainable agriculture—and specifically, to highlight the growing importance of plant biostimulants.

Nutrien is the world's largest provider of crop inputs and agronomic services, supporting hundreds of thousands of grower customers across the United States and globally. We produce all three macronutrients: potash, phosphate, and nitrogen in North America. We also serve 45 states through our extensive retail network, where we aim to provide everything the grower needs to grow a crop, including seed, crop protection tools, fertilizer, and agronomic advice, supporting conventional and organic farmers of a wide variety of crops and farm sizes. We are proud to be a leader in agricultural innovation, including the development and distribution of plant biostimulant products.

In addition to our proprietary portfolio of Loveland Products, we also partner with innovative agricultural technology providers (such as Agricen - USA) to help scale and commercialize their active ingredients and novel formulations, ensuring new tools reach the growers who need them most. A robust research pipeline ensures timely discovery of new ingredients, subsequent field trials and formulation optimization, and, ultimately, commercialization of new products, including biostimulants.

Some of you may be familiar with the term, but for those who are not, plant biostimulants are a class of crop inputs that include substances such as humic acids, seaweed extracts, beneficial microbials, and protein hydrolysates. These works differently than fertilizers, which provide nutrients directly to the plant and are responsible for supporting 50% of modern crop yield potential, and are distinct from pesticides, which help protect the plant from harmful pests and disease. Uniquely, biostimulants work by enhancing the plant's or the soil's natural processes—boosting nutrient release and uptake, improving stress tolerance to heat and cold, and supporting overall plant and soil health.

For example, Nutrien's Reacted Carbon Technology™ (RCT) product platform encompasses a wide range of complex carbon mixtures that have been precisely designed for specific performance and agronomic benefits. Derived from leonardite, the active ingredients are a complex mixture of molecules ranging in size, composition, and chemical functionality, which provide a range of benefits the to the crop, including improved phosphorus nutrient availability, which can result in higher yields. This is but one example of how biostimulants, along with a sound fertilizer management plan, can drive improved grower outcomes at the farmgate.

Biostimulants can also play a significant role in improving environmental outcomes. Depending on the product and the science of its mode of action, many biostimulants enhance nutrient uptake, reducing nutrient loss through runoff or volatilization and enabling more efficient fertilizer use. Some support plant resilience in the face of extreme weather events such as drought, flooding, soil salinity, or temperature fluctuations—tools that are increasingly vital for our growers to manage their day-to-day operations. It is no surprise the biostimulant industry has grown at a steady 10% compound annual growth rate since 2010.

Despite their promise and innovative potential, plant biostimulants face an outdated and inconsistent regulatory framework. There is currently no federal definition for plant biostimulants, leaving states to interpret and regulate them individually. This patchwork approach leads to confusion, inconsistent labeling, and barriers to interstate commerce. It creates unnecessary hurdles for manufacturers, distributors, and—most importantly— uncertainty about product use, trial data quality and marketing claims, which could ultimately impact outcomes for growers.

Over the last few years, our industry has worked to address this gap through the adoption of a model "beneficial substances" bill, approved by the Association of American Plant Food Control Officials (AAPFCO) in February 2024. This model provides a clear definition for plant biostimulants, a path to market and has already been adopted or implemented in over a dozen states through legislation or rulemaking.

However, without a federal definition, inconsistency in evidence-based, regulatory qualification standards, and the risk of misclassification under federal laws like the Federal Insecticide, Fungicide, and Rodenticide Act,(FIFRA) remains. Biostimulants may be wrongly treated as pesticides or plant growth regulators—delaying innovation, adding unnecessary costs, and creating compliance uncertainty by our state fertilizer regulatory partners.

That is why we are urging support for the bipartisan *Plant Biostimulant Act of 2025*, introduced by Representatives Panetta and Baird in the House, and Senators Marshall and Padilla in the Senate. This bill establishes a science-based federal definition of "plant biostimulant," aligned with international plant nutrition standards already recognized in the European Union, Canada, and other leading agricultural economies.

The bill will provide regulatory clarity and consistency across all 50 states; ensure biostimulants are recognized as a distinct input category—not as fertilizers or pesticides; help avoid misclassification under FIFRA; allow for the standardization of qualifying evidence for product registration, encourage broader adoption of sustainable farming practices; spur private

investment in biostimulant research and development; and most importantly, help the U.S. stay competitive with growers in Brazil, China, and the European Union.

Inclusion of this legislation in the upcoming Farm Bill would be a major step forward for American agriculture. It supports innovation, sustainability, and the long-term viability of our food production systems and food security.

To remain a global leader in agricultural innovation, the U.S. must adopt a clear and consistent framework for plant biostimulants. I strongly urge the Committee to support the Plant Biostimulant Act of 2025 and include it in the Farm Bill. This is about more than regulatory alignment—it is about equipping our farmers with the best and most innovative tools they need to meet the challenges of the future.

Thank you again for your time and for your continued leadership in supporting American agriculture.