

Supporting Innovation with the Fertilizer Industry



Overview

Innovation is at the forefront of fertilizer manufacturing. However, the fertilizer industry faces many challenges that prevent timely and cost-effective approval of innovative fertilizer products.

The most challenging obstacle facing fertilizer innovation is the product registration process. Ambiguous or nonexistent uniform guidelines identifying procedures, efficacy requirements, and approval processes routinely impede registration.

A Tale of Red Tape

A key example lending support for a uniform national framework is the most recent attempts to attain regulatory approval for plant biostimulants. Approval efforts began in 2010 with the introduction of a term for defining biostimulants within the American Plant Food Control Officials authorizing committee. After years of failure, the 2018 Farm Bill authorized the USDA to complete a congressional report identifying the necessary steps for approving these innovative products. The report is due December 19, 2020.

What are Enhanced Efficiency Fertilizers (EEFs)?

Fertilizer products that may increase crop yields but also have characteristics that allow increased nutrient availability and reduce the potential of nutrient losses to the environment (e.g., gaseous losses, leaching, or runoff).

What are Biostimulants?

Substances, microorganisms, or mixtures thereof that, when applied to seeds, plants, the rhizosphere, soil, or other growth media, act to support a plant's natural nutrition processes independently of the biostimulant's nutrient content, thereby improving nutrient availability, uptake, or use efficiency, tolerance to abiotic stress, and consequent growth, development, quality, or yield.



Additional Barriers to Product Registration for EEFs and Plant Biostimulants:

- Lack of a uniform national framework for a predictable path to market and product approval
- Lack of a federally approved single label for individual products. Unique labels must be created for each state registration (impeding interstate commerce). Some companies require 30–35 different labels across the United States for the same product
- Requirements to register non-pesticidal products under the Federal Insecticide, Fungicide, and Rodenticide Act prior to consideration for the state approval process
- Ambiguous or nonexistent uniform guidelines identifying procedures, efficacy requirements, and approval processes
- Cost of registration and time to market

What Should be Done and Why?

Congressional action is needed to spur on this innovative area of plant nutrient research and product development by directing both the EPA and USDA to act.

Specifically, the EPA should be direct to:

- Utilize their existing legislative authority to exempt innovative EEF and biostimulant products from registration under FIFRA
- Streamline the FIFRA registration process for nitrification inhibitors

And the USDA should be directed to:

- Develop a Uniform National Framework for approving EEFs and biostimulants
- Develop a single label for all fertilizer products, including EEFs and biostimulants
- Develop an electronic reporting system to track fertilizer sales

BY THE NUMBERS

Manufacturers sold **436,952 nutrient tons** of nitrogen treated with EEF.

Retailers sold **1,232,776 nutrient tons of nitrogen** and **157,917 nutrient tons of phosphate** treated with EEF.

These sales represents **24 percent** of total nutrient tons of nitrogen and **11 percent** of the total nutrient tons of phosphate sold.