Seed treatments are an important tool that provide farmers with an economical means of protecting seeds and seedlings against early-season insect pests and diseases. There is no question that today’s seed treatments are enabling America’s farmers to realize greater yields, healthier crops and higher revenues than ever. At the same time, seed treatment technology is reducing potential risks to the environment, thanks to their highly targeted approach. It is important to note that pesticides applied as seed treatments undergo rigorous testing and review by federal and state regulators to ensure their safety to applicators, wildlife and the environment.

Additional actions have been taken to protect pollinators. Examples are application processes to increase pesticide adherence to seeds; and flowability agents that help minimize seed dust-off during planting; and an ASTA-led stewardship campaign (https://seed-treatment-guide.com/).

Seed treatments deliver a precise application that protects seeds from insects and diseases during early developmental stages;

- by controlling key pests, especially those that are below the ground, destroy the seed or damage the developing seedling
- by protecting and in some cases increasing crop yield, providing growers an economic return on investment
- as a critical component of integrated pest management (IPM) they can reduce non-target exposure and reduce environmental impact and may decrease the need for supplemental foliar applications

It is significant to note that some of these pests damage the seed or seedling such that there are no rescue treatment options. Without protection from such pests offered by seed treatments, the plants will die and/or will not produce.

HERE ARE THE FACTS ABOUT THE REGULATION OF TREATED SEEDS:

1. Seed treatment products are highly regulated, just as foliar and soil-applied pesticides are. Seed treatment products undergo a thorough evaluation by the US EPA, and by applicable state agencies, prior to commercialization. Once product approval is received from the relevant federal and state agencies, then the seed treatment product can be used as a seed-applied technology per the guidelines set forth by EPA.
   a. The Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) allows products that are treated with registered and approved technologies to continue to be treated as the product existed prior to the application of the technology. That is known as the “treated article exemption”. This condition applies only if all three of the following conditions are met:
      i. the article contains or is treated with a pesticide,
      ii. the pesticide is intended to protect the article itself,
      iii. the pesticide is registered for this use.
   b. It has been EPA’s longstanding approach that treated seed qualifies under these conditions which are designed to prevent duplicative regulations. Without the Treated Article Exemption for seed, there would be a tremendous duplication of paperwork and increased bureaucratic burden on regulators, taxpayers and growers. Please note that this is not an exemption from the FIFRA regulations mentioned above.
FACTS (CONT.)
2. Application of seed treatment products to seed for commercial purposes (e.g., to sell treated seed to a farmer) is performed by certified applicators. This is another point in the seed treatment process where there is regulation. Applicators must receive certification and update their licensure to be able to use seed treatment products to apply to seed.

3. Federal seed laws (specifically the Federal Seed Act) regulate the sale and movement of seed in the U.S., and seed companies must abide by those regulations. Within the Federal Seed Act, there are requirements about the labeling of treated seed. The tags on a package of treated seed must include identification of what the seed has been treated with; requirements special guidance dependent upon the toxicity classification of compounds within the treatment recipe; and other applicable labeling requirements.

FIFRA provides for federal regulation of pesticide distribution, sale, and use. All pesticides distributed or sold in the United States must be registered (licensed) by EPA. Before EPA may register a pesticide under FIFRA, the applicant must show, among other things, that using the pesticide according to specifications "will not generally cause unreasonable adverse effects on the environment", which is defined to mean:
1. any unreasonable risk to man or the environment, taking into account the economic, social, and environmental costs and benefits of the use of any pesticide, or
2. a human dietary risk from residues that result from a use of a pesticide in or on any food inconsistent with the standard under section 408 of the Federal Food, Drug, and Cosmetic Act."

The EPA assesses the potential risk for seed treatment products from treating and planting the seed (i.e., environmental fate, ecotoxicology and operator exposures), to the consumption of the harvested commodity (i.e., human health). Labels approved through EPA’s registration process include seed treatment uses that, when their instructions are followed, do not pose an “unreasonable risk to man or the environment, taking into account the economic, social, and environmental costs and benefits”.

LIFE CYCLE STEWARDSHIP
Disposal of treated seed is critical to full life-cycle stewardship, is recognized by the industry as a priority, and is regulated on several levels. As with all materials, there are federal, provincial and local regulations on disposal, all of which must be adhered to. Entities accepting treated seed for disposal may be required to hold a valid permit under those regulations. In addition, there are requirements for disposal of treated seed on the pesticide product label and on the seed tag that must be adhered to. Comprehensive recommendations on proper disposal of treated seed are included in ASTA’s “Guide to Seed Treatment Stewardship” indicating industry’s interest in promoting sustainable and responsible practices. Overall, when existing regulations are complied with, human health and the environment is protected. Stewardship campaigns and industry standards further reinforce compliance. The existing layers of regulations are sufficient and protective, and further regulation is unwarranted.

ADDITIONAL RESOURCES:
ASTA and other stakeholder groups have developed a set of recommendations to assist those involved in the process of treating, handling, transporting, or planting treated seeds. For more information, visit: https://seed-treatment-guide.com/

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