

Why Do I Need Seed Treatments?

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Farmer, Seed Producer and President of the Canadian Seed Trade Association

I am a farmer. Statistics Canada says I am part of only 2% of the Canadian population. I am a seed grower. Agriculture and Agri-Food Canada estimates that 9 out of every 10 bites of food taken in the world begin with the planting of a seed.

As a seed grower, it's my job to produce high quality seed for farmers around the world. As a farmer it is my responsibility to feed the other 98% of the Canadian population, and to contribute to feeding a growing world population. In both of my roles, I need to ensure that every seed I plant will grow.

Farmers are managers of a huge variety of crops, from fruits and vegetables to corn, soybeans, canola, forage crops, grasses and even herbs and spices. No matter what we are producing, our objective is to provide the best possible environment for our chosen crop to thrive. In order to do that, we need to interfere with the life cycles of other organisms: specifically weeds that compete for water and nutrients; and insects, fungi and disease organisms that feed on our plants.

Only 2 decades ago, farmers were regularly facing very substantial crop losses to early insect pressure. Wireworms, seed corn maggots, slugs and millipedes feeding on the planted seeds or on the early seedlings caused up to 30% crop loss. To protect the seeds and the germinating plants, farmers had to add insecticides like Diazanone and Lindane to the seed box. We needed to put Organophosphates or Pyrethroid insecticides in the furrow with the seed, and often we were forced to spray those same products on the fields once the crop emerged. These practises were not a very controlled or selective approach to managing insects.

Our other important responsibility as farmers is to be good stewards of natural resources. We have to be. Our livelihoods depend on the health of the environment in which we operate. That is why, starting in early the 2000s, farmers began to use seed treatments to control insects that feed on seeds and seedlings. Modern seed treatments coat the outside of the seed providing very targeted protection. The amount of active ingredient introduced to the environment with seed treatments is only 10% of that contributed by in-furrow treatments; and it's only 1% of foliar sprays. This technology also facilitates a no-till, precision agricultural operation that protects fragile soils; reducing erosion, compaction and loss of nutrients, and helping to ensure that every seed planted can grow.

Seed suppliers and farmers were the first to take decisive action when dust from the planting of treated seed was shown to have a negative impact on bees in Ontario and Quebec. In only a few months we worked with regulatory bodies and seed treatment companies to develop best management practises designed to protect bee hives from planting dust. We participated in countless farmer meetings, pod casts and retailer training sessions to ensure that the best management practises were implemented for this growing season. We updated and improved labelling on treated seed packaging material and put substantial financial and human resources into research projects to test equipment modifications to reduce dust. Seed suppliers offered farmers a greater choice of non-insecticide treated seed, and virtually all of the insecticide treated corn and soybeans in Ontario and Quebec were planted using a new lubricant that was shown to very substantially reduce dust while planting.

The result was that despite our very long, harsh winter, the number of bee death incidents reported to Health Canada's Pest Management Regulatory Agency after spring seeding was one-third of the reports in 2013 and the number of affected bees per incident was 10 times lower than last year.

I am proud of what we are accomplishing as farmers. We are a shrinking part of the population but each Canadian farmer now produces enough food for 120 people, on less land and using fewer inputs and less water. We have adopted cutting edge technology to be more productive, and to leave a much smaller impact on the environment, including bees. But the job isn't done. We are continuously searching for better and better ways to produce food, in an environmentally and financially sustainable way.

Farmers don't take this "business" of farming lightly. In fact, it is not just a business; it's our way of life. We live where we work, in the environment that we influence. We carry heavy responsibilities: to produce safe, high quality and affordable food for a growing world population; and to do it in a way that minimizes the risk to nature. We can't do that without using innovative and specialized tools in an environmentally sustainable way. That's why I need seed treatments.

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