

Why should I use seed treatments?

A crop's best genetic potential exists when it's still in the bag. Next comes the reality of unpredictable weather, disease, insects and environmental conditions. Seed treatments are crucial for maximizing crop success.



Benefits of Seed Treatments

Many crops show a **yield response to earlier planting** and a longer planting season. As farm sizes increase, planting occurs earlier on the calendar than ever before. This means a wider window for potentially adverse early growing conditions. *University of Nebraska: soybeans planted after May 1st can drop 0.25 to 0.63 bu/a per day.*



Larger acreages demand earlier planting dates



Protect seed stand & population

Seed treatments **protect early yield potential** by ensuring healthy and uniform plant stands. All crops respond best when the plant from a seed makes it through to harvest. In addition, even and vigorous early growth **speeds canopy closure** to improve moisture retention and weed control. *Arkansas corn data published by Pioneer: eliminating skips can gain 14% in yield; eliminating doubles can gain 4%.*

Protect against early season plant diseases

The foundation of any successful crop is an **effective fungicide seed treatment package**. Seed and seedling diseases can be rampant in the soil, especially under cool and wet conditions. Unpredictable weather patterns sometimes create disease pressure later than expected. *30 wheat trials compiled by NDSU: fungicide seed treatments averaged a 4.3% yield increase and an 8.2% stand increase.*



Take-All disease in wheat



Bean Leaf Beetles in soybeans

Protect against early insect and nematode damage

Yield-limiting effects can take many forms: seed feeding by wireworms in wheat, root impairment by nematode in many crops, thrip leaf feeding in cotton seedlings, stemborers in rice or aphids in soybeans. Insect damage can cause irreversible yield damage early in the season. Seed treatments can reduce or eliminate these threats. *Journal of Economic Entomology, 2018: 100 cotton trials in AR, LA, MS & TN showed insecticides increased lint yields averaging 102 lbs/a.*

Fertility and growth promotion

In addition to pesticide seed treatments, several important classes of products provide strong contributions to a healthy crop and help ensure the best results at harvest.

Inoculants ensure that legume crops such as soybeans, peanuts and peas can fix their own nitrogen, often eliminating the need for N fertilization. It's important to use high quality products and best management practices for the best results.

Nutritionals place important fertilizer components on the seed, where young seedlings can use it immediately.

Plant Growth Regulators can create growth effects in a crop by mimicking or amplifying natural plant processes - aiding in plant defenses, creating faster growth and ensuring stronger plants.

Seed treatments are convenient and efficient inputs that help ensure a healthy crop and optimum harvests. They can be tailored to the agronomic issues for a specific crop and field. With very low use rates and industry-standard methods for accurate application, they are important tools for environmental stewardship.

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