

Greater emphasis is being placed not only on enhancing the appearance of seed, but improving its performance.

## Adding More Value to your Bag of Seed

Seed appearance and performance are vital as competition increases in agriculture. Seedsmen want their seed to stand out and outperform their competition. Today, greater emphasis is being placed not only on enhancing the appearance of seed, but improving plantability, stand establishment, seed flow in seed planters and so on.

As a result, seed coating and seed enhancement technology has enormous potential and has become an essential element of success in the production of many crops.

The technology can be divided into several main groups:

### Coating Technologies

These products involve applying a coat around the seed, from a very thin layer, as in the case of film coating, to a thick layer, which results in a real pellet. This enables growers to improve the sowability of the seeds by making them dust-free or by changing the shape and the weight of the seeds.

One important benefit of this technology is that you can add all kinds of things to these layers, such as crop protection compounds, biologicals, nutrients and other additives that protect and stimulate the growth of the young seedling.

Some seed coatings can even protect crops against inclement conditions. A product developed by Landec Ag prevents germination of the seed until the soil reaches the optimal soil germination temperature. The coating protects corn in the soil and allows corn growers to plant up to four weeks earlier than normal while avoiding the risk of chilling injury.

Without this protective coating, planting earlier in cold, wet soil could cause poor or no germination to occur. Products like this can provide growers with a wider planting window, effectively lowering costs, reducing the risks associated with late planting and potentially increasing yields across the entire farming operation.

### Enhancement Technologies

These types of products improve the germination and overall quality of the seed. This involves priming seed in order to break germination dormancy or to prepare the seed to germinate better under conditions that are not optimal.

Also, selecting high germination seed from low germination seed is an essential tool to improve the overall quality of seed lots. It is very important to give the grower seed that is clean and free from certain diseases. Although seed companies are doing everything possible to produce seed free from seed-borne diseases, it sometimes can happen that seeds are infected. Seed enhancement companies are developing disinfection technologies that make such seed suitable for planting.

### Colorants and Polymers

It is a Federal Law in the United States for any seed treated with a pesticide to have a colorant added to prevent treated seed from entering the food or feedstuff markets, which could lead to accidental consumption. Seed colorants identify treated seed, reducing the mishandling of seed treated with active ingredients such as fungicides or insecticides. With the help of seed colorants and polymers, producers can feel confident that their seed investment is safe.

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Colorants can also be used to segregate technologies, such as herbicide resistance. This can help eliminate confusion at planting, which minimizes potential costly mistakes when a grower applies the chemical.

Colorants and polymers help seed companies by giving their seed products a distinctive look. It also opens unlimited options to uniquely brand technology. There are many companies specializing in seed enhancement technology that have a wide variety of seed colorants and custom colorants and pigments to meet every grower's needs.

A combination of these different technologies will help ensure more uniform emergence, a better stand establishment and the ability of the seed to overcome unpredictable climatic conditions in the field.

