

STATUS AND NEW DEVELOPMENTS IN SEED COATINGS

Bill Talley

Summit Seed Coating

Caldwell, ID

The acceptance and use of coated alfalfa seed has become the standard of how alfalfa seed is being sold. Coated seed, refers to a buildup in coating material of 10-34% . Seventy percent of proprietary alfalfa seed is now buildup coated, and 80 % of that amount is a 34 % coating. The remaining is a 10% buildup and is usually only used as a carrier for inoculation and fungicide. The higher buildup coatings are able to carry more active ingredients that also enhance the agronomic benefit to the young seedling. The benefits to the young seedling, from the components of the coating have led to a large increase in market share of coated seed.

National seed companies collect a significant amount of data each year regarding sales and replant issues. This data is compiled for the companies to evaluate their sales markets and to determine where they need to improve their products. Alfalfa seed, due to its small size and shallow planting depth, is susceptible to stand establishment failures. Replant issues are not good for the farmer or the seed company. Therefore the seed companies like to keep these to a minimum. Many companies in the industry have programs for replanting; however they would rather not have these issues. Two companies that shared their data with Summit Seed Coatings found that replants occurred less often when the farmer had used coated seed. The data from one company showed the replants were 30% less than just Apron Pre-inoculated seed. Another company's data showed that their replants were 50 % less. Although replants were a low percentage of sales, when coated seed was used there was a significantly lower number of complaints. This data was nationwide and looked at the sales of 20,000 + units for each company.

Where does coated seed do its best? Planting under ideal conditions, excellent soil preparation, and favorable weather, uncoated and coated perform the same. Both excel and produce a great stand. Coated seed however stands up better in less than ideal condition, less than ideal planting condition, and less than ideal weather. The coating protects the seed and seedling as it is trying to get started.

The processes have evolved into a much more specialized and sophisticated coating than five years ago, and are greatly advanced from the first seed coating. The use of Hydration polymers, mychorizze, fungicides, insecticides, micro nutrients, bio enhancers are all being used in seed coatings for alfalfa seed. Our company has done extensive research, in house, university, and seed company trials to put the best seed coatings on the market. (See tables.)

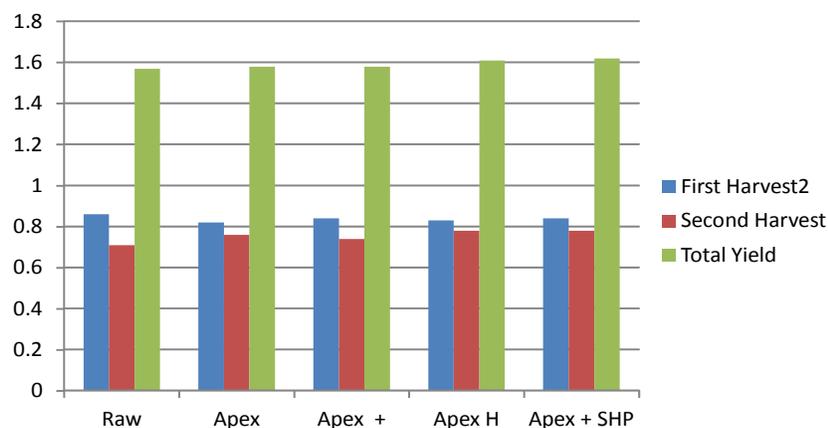
The areas where we see some of the greatest benefits for seed coating are in a combination of several enhancement properties. The super hydration polymers are helpful in keeping the seed moist during germination and holding the moisture to keep the germination process moving to maximize emergence of the seedling. The polymer also keeps the active ingredients, micro nutrients, and other enhancements close to the seed for maximum benefit. Many of these components are used in small amounts and tend to leach away from the seed during germination. The polymer holds it next to the seed for maximum benefit. Lab studies have shown that the polymers are able to lock the components next to the seed for maximum benefit.

The chemical companies are also more in favor of doing research for adaptation of their products into seed treatments. Seed treatments are more environmentally friendly, in that you are applying them at point of use and for selective control. The use of more sophisticated beneficial treatments for corn and soybeans makes it easier for these treatments to be accepted on other crops.

Our company does extensive research with active ingredients seed treatments, and we also market and sell many organic seed coatings. We now have OMRI listings for several of our coating and we are a certified organic processor. While many of our coatings are not approved for organic use, we do have certain coatings approved. Our Organic Certified products are sold under our Green label Apex Green and Pinnacle Green.

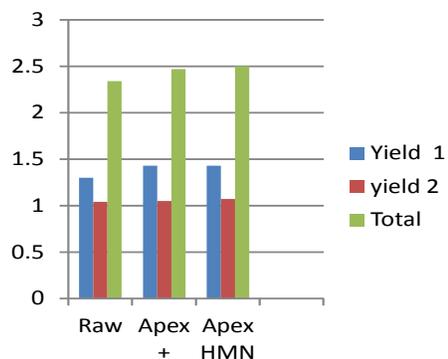
The future for seed coatings looks positive and will continue to grow. Many coating companies will continue to bring new and improved products and enhanced coatings to the industry.

University of Wisconsin Alfalfa Trial All Locations



2011 Seed Treatment Trial

National Seed Company

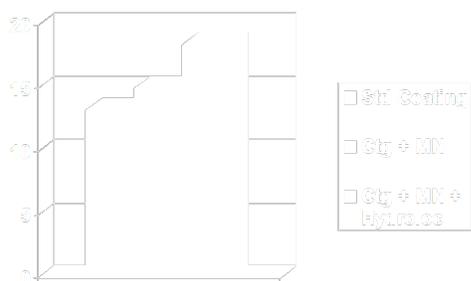


Wisconsin

- Raw Apron Inoc
- Apex Plus Patented Formula
- Apex Hydroloc QS
- Micro Nutrient Package plus Super Hydration polymer



Fresh Weight per Tray



Total Root Weight per Tray

