

# Alfalfa Seed Treatments Key to Long-Term Stand Productivity

Dave Hallberg, Doug Suwyn, NEXGROW® Alfalfa

Although it's only the first chapter in the life of an alfalfa stand, the first 60-90 days after planting are the most crucial to long-term productivity. Fortunately, equipping your seed with the right seed treatment can stimulate germination, protect seedlings against disease and insects, and boost early season stand development during this important time.

Depending on field challenges, Dave Hallberg, NEXGROW® Alfalfa Brand Manager, recommends three different seed treatments: 1) Apron® XL, Nitragin® Gold, and Optimize® Gold, 2) Stamina® fungicide, and 3) CruiserMaxx® Alfalfa insecticide/fungicide.

Genetic resistance to disease usually increases as alfalfa develops, but each of these three seed treatments helps defend against diseases during an alfalfa plant's infancy, when it is most vulnerable. While they share some similarities, these seed treatments also have primary strengths enabling farmers to select the option best targeting the challenges faced by their stand.

"CruiserMaxx is the first alfalfa seed treatment to protect against early season insect pressure," Hallberg says. "Stamina, on the other hand, is the first seed treatment shown to defend against *Aphanomyces* race 1 and 2. If neither of those issues have been a problem in the past, the Apron XL plus Nitragin Gold and Optimize Gold seed coating is an ideal choice."

Here's a closer look at each of these seed treatments and how they can help your alfalfa stand get off to a strong start.

## APRON XL + NITRAGIN GOLD + OPTIMIZE GOLD

Consisting of three components, this seed treatment protects against early season diseases and enhances the use of nutrients driving natural growth processes, maximizing plant health and crop performance.

**Apron XL** fungicide protects against early seedling diseases such as: *Rhizoctonia* (seed rot and damping off), *Fusarium* (wilt, damping off, crown and root rot), and *Phytophthora* (root rot)

**Nitragin Gold** is a pre-inoculant nitrogen-fixing bacteria containing specially selected natural rhizobia strains leading to high levels of nitrogen fixation for maximum yields.

**Optimize Gold** provides season-long benefits such as: larger and healthier root system for better nutrient and water uptake, earlier nodule initiation for earlier and enhanced nitrogen fixation, improved stand establishment, better plant health for greater ability to handle environmental pressures, and higher return on investment through increased forage yield. It also contains LCO (lipochitooligosaccharide) Promoter Technology® for alfalfa, which is a unique molecule enhancing a plant's nutritional capabilities when present at the time of planting. This drives the natural growth processes such as root and shoot development, immediately and independently of variety, soil, and environmental conditions. On average, it has increased yields by about 0.2 tons/ac according to 43 multiyear research trials performed by the manufacturer, Novozymes.

## STAMINA FUNGICIDE

Powered by F500® fungicide (same active ingredient as Headline®), Stamina protects against the *Aphanomyces* organism which deters root development, reduces nodulation and weakens, stunts, or even kills seedlings outright. This is a wet soil disease occasionally misdiagnosed as herbicide damage. It's most common in Wisconsin, eastern Iowa, and southeastern Minnesota, but is becoming more of a problem across the country. To achieve maximum protection against seedling diseases, Stamina can be combined with the Apron XL, Nitragin Gold, and Optimize Gold seed treatment. Forage Genetics alfalfa research trials from 2015 show adding Stamina to this seed treatment led to a 9.3% yield bump in Marshfield, WI, and 7.9% in Hastings, MN.

## CRUISERMAXX ALFALFA

CruiserMaxx Alfalfa combines Apron XL and Maxim® 4FS fungicides with Cruiser® insecticide to protect against yield-robbing diseases like *Pythium* and *Phytophthora* while defending against early season insect pressure. It holds the distinction of protecting alfalfa seedlings against aphids and leafhoppers, which lead to severely stunted growth when left unchecked. In addition to significant yield loss, leafhopper injury can reduce hay quality and cause a reduction in protein and vitamin A, while aphids can cause thinner stands, reduced tonnage, wilting, and chlorosis of leaves. Another benefit is the Cruiser Vigor Effect, which comes from the thiamethoxam component in Cruiser. It helps alfalfa develop a stronger root system, uses inputs like water and nutrients more efficiently, emerges more quickly, and grows more evenly. Vigorous plants deliver higher and more consistent yields, provide enhanced quality, and require fewer resources. Syngenta research trials from Michigan in 2010, show CruiserMaxx yielded 22 tons/ac. That's a stark contrast from the 13 tons/ac yield realized with the same treatment minus Cruiser, and just 10 tons/ac with the untreated check. It is compatible with Nitragin Gold and Optimize Gold with LCO Promoter Technology.

## LOWER SEEDING RATES

Since a higher percentage of treated seeds successfully germinate, farmers should not increase seeding rates due to the extra seed treatment. "I like to tell farmers that when it comes down to it, we're looking for vibrant seedlings per square foot – not 'seeds' per square foot," says Doug Suwyn, NEXGROW® Product Specialist. "In addition to improving germination rates, these seed treatments also help improve the winter survival of fall seedlings by reducing the impact stresses have on a young stand throughout the fall and early winter season," Suwyn concludes.

For information about these alfalfa seed treatments, visit [www.plantnexgrow.com](http://www.plantnexgrow.com) or call your local NEXGROW® Alfalfa specialist.

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