



Since Nitro-NP seed coating can improve seed germination and plant establishment, there is no need to increase seeding rates over uncoated seed.

Nitro-NP enhanced seed coating technology is available on select forage grasses exclusively through Smith Seed Services and their distributors.

Seeding legumes? Be sure to use NitroCoat for Legumes to ensure optimal rhizobium inoculaiton. Learn more at Nitrocoat. com. IMPROVE YOUR FORAGE GRASSES

seed coating technology

**Boost root growth** 

Increase germination

Enhance stand performance

## **NITRO-NP: The POSITIVE Domino Effect**

*Nitro-NP enhanced seed coating technology is now available on select forage grasses. It's as easy as 1-2-3!* 

- 1. Nitro-NP water absorbing technology increases seedling germination.
- 2. Nitro-NP phosphorus supplement gives news roots and added boost

3. Nitro-NP slow-release nitrogen feeds initial leaves hastening plant establishment. These first steps are like dominos, which have a long chain of positive effects.

## 1. Capture the Water

Thanks to a calcium carbonate (lime) coating and super-absorbent polymers, Nitro-NP seed coating technology helps both draw surround water to the seed and provides a sort of storage tank to hold seed available moisture

For a seed to germinate, the shell of the seed needs to be softened and the inside of the seed needs to have a chance to absorb the water. If, however, there is only a small amount of water, the seed may never get soft enough or it may germinate only to die for lack of additional moisture.

During this critical time, while root-hairs are just forming, Nitro-NP technology holds moisture next to the seed. The seedlings can tap into this source, take up the water and expedite root growth. This domino effect helps the new plants to reach farther and access the surrounding moisture and nutrients.

Nitro-NP's water absorbing technology helps reduce seedling mortality and speed up establishment. More plants and faster establishment lead to thicker stands, higher yields, and less weeds.

## 2. Grow the Roots

Phosphorus is a critical nutrient for young seedlings. By supplying a small amount on the seed, Nitro-NP gives these new seedling roots immediate access to phosphorus, thereby allowing them to grow bigger, faster.

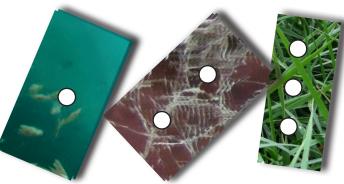
The quicker initial root hairs develop, the faster they can access nutrients and water in the soil, maximizing growth both above ground and below. This rapid initial root growth is very important to ensure full establishment before the severity of either winter or summer weather.

When plants are able to survive their initial harshweather season (winter or summer), they have a better chance of thriving the next season. Thriving plants have higher yields and greater stand life.

Additionally, faster growing plants have better odds of combatting weed pressure. Reduced weed pressure increases quality and stand life.

Finally, healthier, younger plants will be more resistant to disease pressure. Nitro-NP is the first step in in this critical process.





## 3. Feed the Leaves

Nitrogen is essential for leaf growth. By placing a small amount of slow-release nitrogen at the seed source, Nitro-NP gives new grass plants an initial boost in a way that is different than soil-applied nitrogen.

Soil-applied nitrogen, especially at time of seeding will be taken up by all plants and new seedlings in the surrounding soil, including weeds and competitive plants. Feeding existing plants can add to the difficulty of establishment of desired plants. With Nitro-NP, the new grass plants have direct access to slow-release nitrogen. This nitrogen is less likely to be stolen by unwanted neighbor plants.

Boosted by Nitro-NP nitrogen, the new seedlings have a jumpstart in growing their initial leaves to capture the necessary sunlight which begins the all-important process of photosynthesis.

The faster the plant establishes, the better it will compete with neighboring plants and produce thicker stands. Thicker stands mean less weeds and greater yields. Nitro-NP starts the dominos falling in the right direction!

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