

PROTINUS™

SEED NUTRITION PRODUCT GUIDE

PROTINUS is a unique seed-applied fertilizer product scientifically formulated to promote early plant nutrition and growth in crops.

The benefits of PROTINUS Seed Nutrition

- Seedlings emerge faster and more evenly – setting the stage for improved crop performance
- Larger seedlings with longer, more developed root systems are better able to compete with weeds for moisture and nutrients
- Enhanced early plant health helps young seedlings withstand tough early-season growing conditions, such as cool spring temperatures

A healthy crop means better yields, and a healthy return on your seed investment



PROTINUS™

SEED NUTRITION PRODUCT

Because a healthy start can make a world of difference™.

Getting a crop off to a good, healthy start is critical to its long-term performance throughout the season. PROTINUS delivers a strong start for your crop, helping it reach its full growth and yield potential.

PROTINUS has been extensively evaluated on a range of crops including: corn, cotton, cereals, canola, soybeans, grasses, forages, sunflower, peanuts and vegetables, across many geographies. Results are remarkably consistent, showing improved plant health, seedling growth and crop performance.

The bottom line? Plant health benefits give crops the best fighting chance to optimize growth and productivity to maximize yield potential.



PROTINUS-treated wheat seed results in larger seedlings with longer roots.

How PROTINUS works

Years of experience, research and development have led to PROTINUS – a unique seed-applied fertilizer that enhances natural plant processes:

- PROTINUS improves seedling growth by safely delivering small amounts of important nutrients for early plant health (zinc, manganese and iron) directly on the seed.
- The patented formulation ensures nutrients are immediately available to the young seedling right after germination – and before the plant can easily access soil nutrients on its own.
- PROTINUS is scientifically formulated to optimize pH in the small microzone around the seed, creating ideal conditions for greater nutrient availability.
- PROTINUS is suitable for all crops.

The result of better early nutrition? Growers will see the benefit in crop establishment, early season growth and the ability to withstand challenging growing conditions.

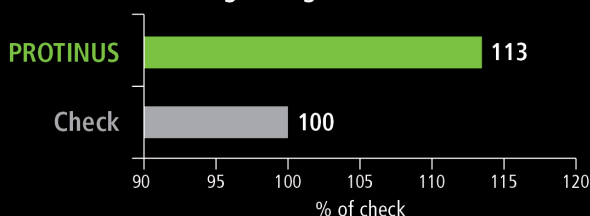


PROTINUS delivers improved crop performance

Faster, more even emergence

Rapid and uniform emergence helps set the stage for vigorous seedling growth, a healthy crop canopy, and the ability to manage in-crop applications.

Effect of PROTINUS on seedling emergence

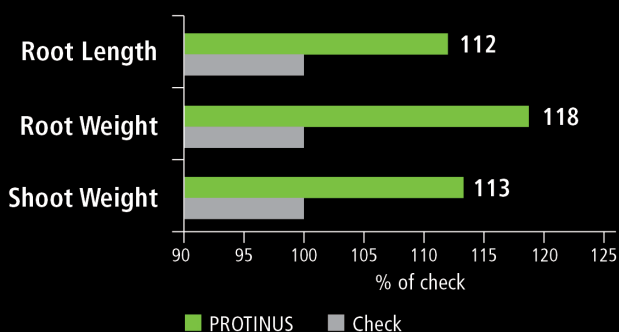


On average, PROTINUS-treated seed emerges one to two days faster, with 13% more plants (based on 190 comparisons, over 4 years).

Larger seedlings. Longer, more developed roots

PROTINUS treatment results in a more robust and healthy stand. Larger seedlings, with longer and more developed root systems are better able to compete with weeds for moisture and nutrients. Greater above-ground growth directly relates to the plant's ability to photosynthesize, and ultimately influences yield.

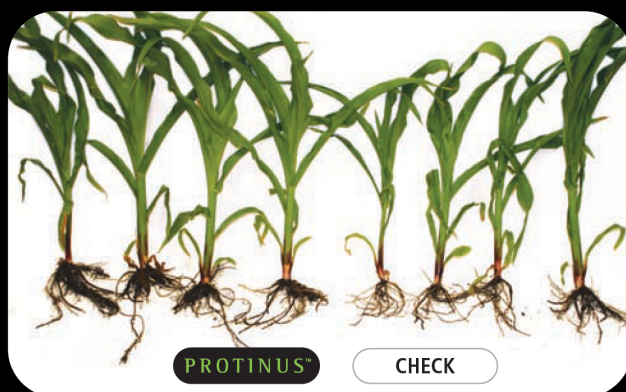
Effect of PROTINUS on shoot and root growth



PROTINUS-treated seed results in larger, more vigorous seedlings (based on 379 comparisons, over 4 years).

Ability to withstand challenging early growing conditions

Enhanced early nutrition, more vigorous seedlings, and bigger roots help the young crop grow through challenging early season conditions, such as cool and wet, or hot and dry environments.

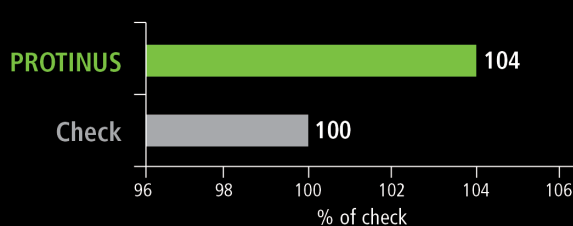


PROTINUS-treated seed (left) results in plants that are better able to withstand tough early season conditions than the standard seed protection treatment (right).

Optimized yield potential

Agronomists agree that larger, healthier seedlings will result in a higher yielding crop. Data from hundreds of research and demonstration trials prove that the early season nutrition and plant health from PROTINUS improves crop yields in corn, soybeans, wheat and other crops. Growers benefit from a positive return on investment with PROTINUS.

Effect of PROTINUS on corn yield



In over 400 comparisons, PROTINUS application improved yield in corn by 4% on average.

How to use PROTINUS

Featuring the patented DDP® coating technology, PROTINUS is a dry powder that can be applied immediately following a liquid seed treatment application, or to dry seed where no liquid application is used. We are committed to working with you to find the best application options for your operation. Please contact us at wolftrax@compassminerals.com or call 204-237-9653 for more information.

Application Rates

6 oz/100 lbs seed (187.5 g/ 50 kg)

3 oz/50 lbs seed (93.75 g/ 25 kg)



PROTINUS™



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