

PROTINUS™

SEED NUTRITION PRODUCT



Optimize your canola seed performance with PROTINUS Seed Nutrition Product

Getting your canola stand off to a good, healthy start is critical to its long-term performance and yield potential. Research trials have shown improved emergence and early-season growth with PROTINUS™ Seed Nutrition Product.

PROTINUS is a unique seed applied product scientifically formulated to promote early plant growth and nutrition in agricultural and horticultural crops, and works in the following ways:

- PROTINUS enhances the pH in the micro-zone around the seed, enhancing nutrient availability and optimizing nutrient uptake.
- PROTINUS delivers nutrition directly to the seed. Three key micronutrients important to early plant growth functions – zinc, manganese and iron – are included in the PROTINUS formulation.

Improved Emergence and Early Season Growth

PROTINUS treated canola seed has shown a positive response in early growth under both optimal and cool, spring growing conditions. Seedlings emerge more quickly and evenly, resulting in a more vigorous stand and tend to be larger, compared to the check.

In a study evaluating PROTINUS on three different canola hybrids, PROTINUS treated canola seed tended to emerge more evenly and result in larger seedlings compared to other treatments.

Impact of PROTINUS on Hybrid B seedling weight (g)

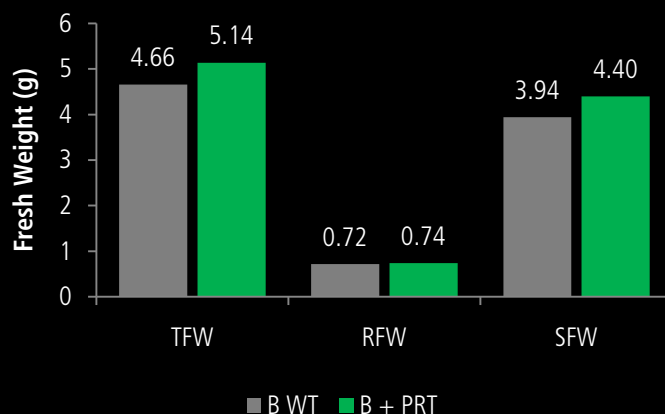


Figure 1: PROTINUS treated canola seed (B + PRT) resulted in 10% more fresh weight overall and 13 % larger roots compared to the check.

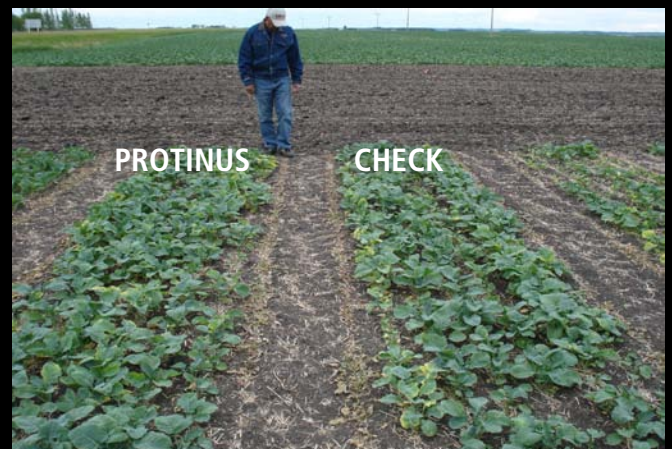


Photo 1: Protinus treatment canola (on the left) appeared more even overall, with larger seedlings, compared to the check (right). Kamsack, SK (July, 2009).

Larger, More Vigorous Seedlings

In a study evaluating the impact of PROTINUS on canola, the PROTINUS treatment resulted in seedlings with 15% greater total fresh weight compared to the check. In addition, roots appeared longer, and more fibrous, compared to the check.

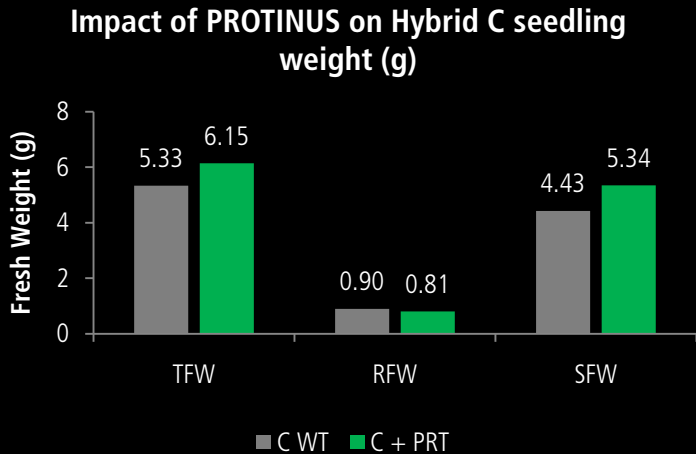


Figure 2: PROTINUS treated canola seed (C+PRT) resulted in seedlings that were 15% larger than the check.

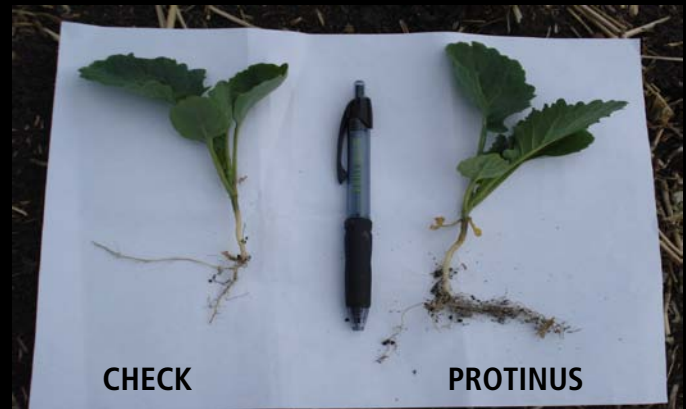


Photo 2: Canola treated with PROTINUS (on the right) had more even emergence and larger, more developed root systems compared to the check (on the left). Kamsack, SK (July, 2009).

PROTINUS is Registered for Use in Canada

PROTINUS has been widely tested on a variety of crop types including corn, soybeans, wheat, canola, grass, forages and vegetables. Results from hundreds of individual trials show that enhanced nutrition delivered directly to the seed through PROTINUS application, results in earlier, more even emergence, and larger root and above-ground plant growth.

After reviewing efficacy and quality data for PROTINUS, the Canadian Food Inspection Agency granted registration and approval for sale in Canada on March 1, 2010.

Based on the results of these studies, and others conducted by Wolf Trax, PROTINUS treatment resulted in more even emergence, faster stand establishment and larger canola seedlings.

For more information about **PROTINUS**, please contact Wolf Trax or visit us online at www.wolftrax.com.

