



EARLY SEED NUTRITION ENHANCES SEEDLING VIGOR

As growers seeded acres increase more seed is sown into cold soils early in the year. Even with the improvement in precision seed placement over the past number of years, one can not underestimate the importance of high seedling vigor. Starting with a seed that has been tested and is high in germination and seed vigor is an excellent starting point. Controlling the conditions of the soil at seeding time is often out of the growers control. However by utilizing proper seed treatments and seed nutrition products the grower can lessen the risks associated with seeding into cold, dry soils. Under these conditions newly germinated seedlings have little plant nutrition to draw from

until the young root hairs reach the fertilizer applied through the air drill.

Many growers are turning towards a seed nutrition program to give the young plants a jump before the fertilizer becomes available to the plant.

A new product from Alpine Plant Foods called ASN (Alpine Seed Nutrition) is providing essential nutrition to germinating seeds. Key to this new product is a large dose of phosphate which is key to developing an early root system. Independent studies have shown that ASN can increase seedling root mass by 17% in wheat and 10% in soybeans.

The ASN program also includes key micronutrients such as zinc, and manganese known for its positive effects on seedling germination rate and vigor. The innovative product also contains molybdenum which aids in the nodulation of legumes. Boron is another component of the product which is known for its enhancement in flowering and seed set. Rounding out the ASN micronutrient package is copper which aids in disease control.

ASN for CEREAL CROPS

Wheat Seed Nutrition Trial - Root & Tissue Mass Weights completed on September 18, 2009				
Treatment & Description	Reps - 4	Whole Plant Weight (gm)	Root Weight (gm)	Tissue Weight (gm)
CHECK	Average	110.10	28.33	81.78
ASN	Average	126.73	33.38	93.35
ASN	AVERAGE	+15.1%	+17.8%	+14.1%

As a Seed Treatment for Cereal Crops:

- Wheat, Barley, Oats, Triticale etc..... 5 Litres
- Sorghum, Safflower 5 Litres
- Canola, Millet, Turnip, Radish, Sesame 10-15 Litres

Note: Apply ASN at least 30 minutes before seeding.

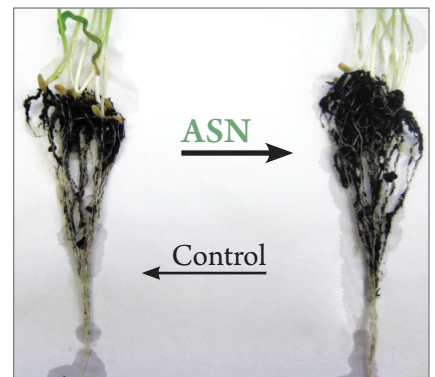
ASN for PULSE CROPS

Soybean Seed Nutrition Trial - Nodule Counts, Root & Tissue Mass Weights completed on September 25, 2009					
Treatment & Description	Reps - 4	Nodule Count	Whole Plant Weight (gm)	Root Weight (gm)	Tissue Weight (gm)
INOCULANT ONLY	Average	10.55	146.8	42.9	103.9
ASN + INOCULANT	Average	11.03	163.9	47.3	116.6
ASN	AVERAGE		+11.6	+10.3	+12.5

As a Seed Treatment for Pulse Crops:

- Lentils, Beans & Peas, Chickpeas 3-5 Litres (Rate/tonne of seed)

Note: Apply ASN at least 30 minutes before seeding



Cost for the ASN program ranges from two to four dollars per acre dependent on the seeding rate. For small seeded crops such as canola cost is only 7¢ per pound.

As growers know all too well early healthy germinating crops tend to provide the grower with an earlier maturing crop and higher quality yields.

For more information on ASN contact **Terry Good** Western Canada Sales Manager 1.800.265.2268 ext. 233



the starter fertilizer company™