



SEED APPLIED TECHNOLOGIES



**PRECISION**
LABORATORIES

Results. Expect it.®

SEED APPLIED TECHNOLOGIES

At Precision Laboratories, innovation isn't a buzzword – it's built into every product we design. Our products are university and field-tested to ensure biological performance and optimum value. Our specialized chemistries for plants, seeds, soil and water produce high-yielding crops and quality turfgrass.

**INNOVATIVE, SENSIBLE,
EFFECTIVE PRODUCTS.**

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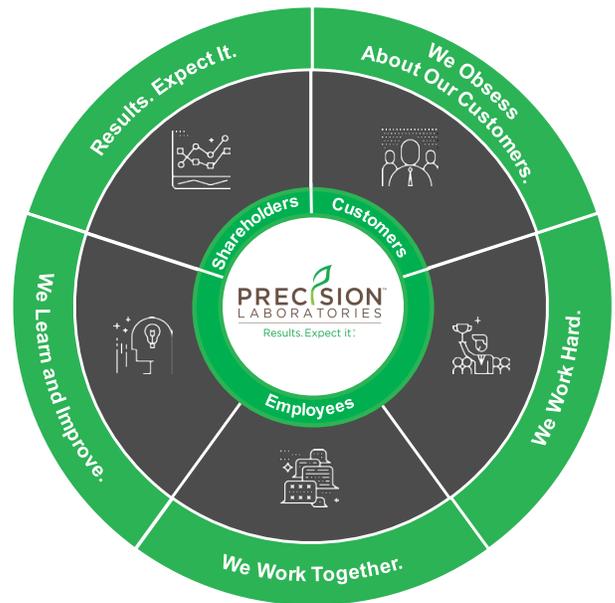
FROM OUR PRESIDENT

Thank you for taking the time to consider Precision's portfolio of seed applied technologies. Your assessment of the results these products deliver is the true measurement of their value. If you are a customer today, I trust you've seen that value. If you're new to Precision, I look forward to our demonstration of value to you.

Our daily activities focus on the three priorities of customer, employee and shareholder. Core values demonstrated by each member of the Precision team are identified in this graphic, those being an obsession about our customers, hard work as a team, a spirit of constantly learning and improving and delivering results, which you can expect.



Terry Culp
President



ADDING VALUE



TECHNICAL EXPERTISE

- Collaboration with top researchers have validated claims of superior performance and quality
- Laboratory capabilities and resources to help you solve everyday problems
- Technical training to give your sales team the confidence to sell more effectively



INNOVATION

- Basic manufacturing to build solutions from the molecule to completion
- Developing breakthrough products in the areas of:
 - Polymers
 - Pigments & dyes
 - Seed applied nutrition
 - Long-life inoculants



RESULTS. EXPECT IT.

- Dedicated sales support
- Customized marketing support for your sales team
- Certified distributor of Syngenta Seedcare products

THE BENEFITS OF SEED-APPLIED NUTRITION

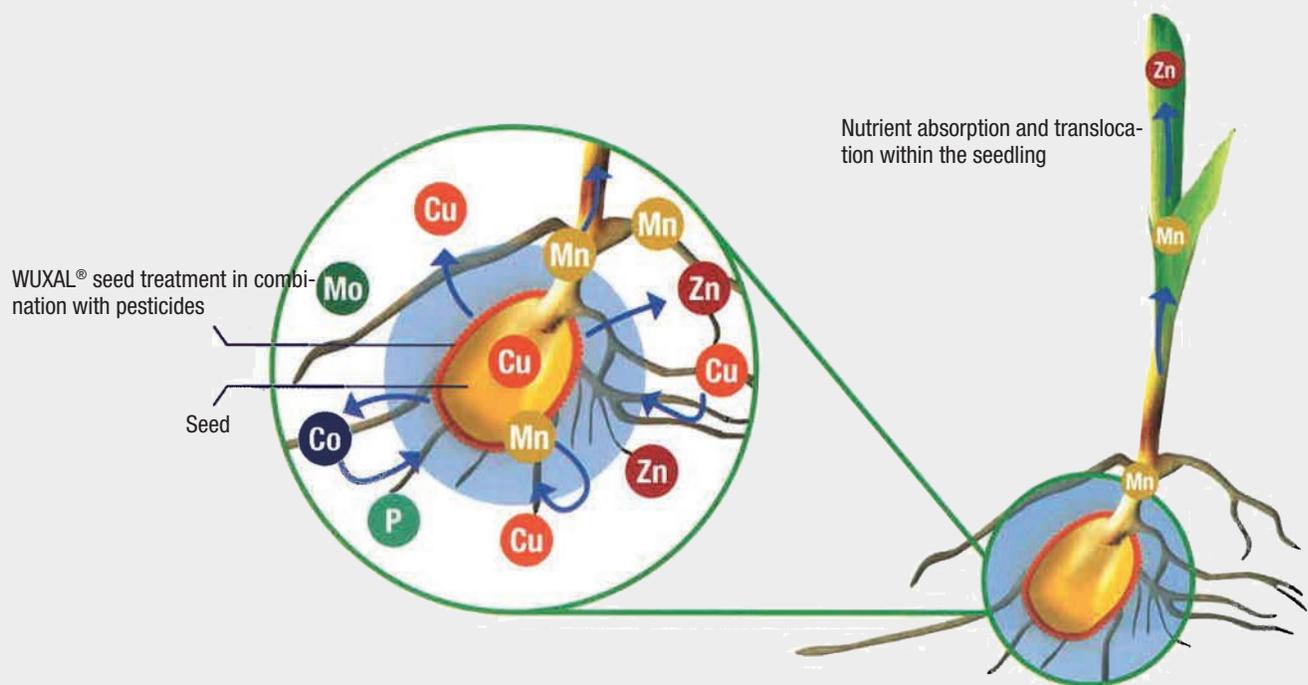


The most efficient means of supplying early micronutrient requirements of emerging crops is seed-applied nutrition. Seeds naturally have nutrient reserves, yet this often is not at optimal levels and could result in underdeveloped root systems. The early demand for enhanced nutrition may become critical under dry, drenched or cold soil conditions.

As soon as the seed starts to soak up water, the nutrient seed coat will slowly diffuse into the surrounding area around the seed. The nutrients will be rapidly absorbed by the developing root system. Other fractions of the nutrient seed coat will also be absorbed into the seed and will stimulate germination. As a result, the young seedlings become more vigorous and can develop more rapidly providing the plant a good start.

Nutrient seed treatment:

- Boosts early growth
- Improves health and vigor of seedlings
- Creates uniform plant emergence
- Better root development
- Enhanced crop resistance to herbicide stress
- Improved water and nutrient supply to the plant
- Shows higher efficiency than any early foliar spray when the leaf surface is still poorly developed for sufficient foliar absorption



WUXAL® TERIOS ZN+ SEED TREATMENT

A nutrient suspension for seed treatment with special emphasis on zinc. The composition of Wuxal Terios Zn+ meets the specific requirements of cereals, especially for crops with higher zinc requirements like rice and corn, or when growing on soils with low zinc availability. Wuxal Terios Zn+ suspension creates an even distribution on the seed surface and sticks well on the the seeds. It can be used in combination with other seed treatments like fungicides and insecticides.

Use Rates*		Package Size	Product Weight
Rice Seed, Dry	1.50 fl. oz./cwt	2 x 2 gal 30 gal	11.43 lbs./gal.
Corn	2.0 fl. oz./cwt		
Grain Sorghum (milo)	2.0 fl. oz./cwt		

*Other seed types listed on label



WUXAL® TERIOS MN+ SEED TREATMENT

This seed-applied nutrition for soybeans is immediately available to the seedling, regardless of soil moisture and temperature conditions. It contains fully-chelated manganese (Mn) to ensure availability to the plant.

Crop*	Dosage Rate	Water Dilution	Slurry Treatment Rate	Package Size	Product Weight
Soybeans	1.50 fl. oz./cwt	1.50 fl. oz./cwt	3.00 fl. oz./cwt	2 x 2 gal 30 gal	11.18 lbs./gal

*Other seed types listed on label



WUXAL® COMO SEED TREATMENT

An easy to use formulation which can be applied directly to seed through most equipment designed to apply liquid, flowable or slurry seed treatment products to seed.

Crop*	Dosage Rate	Water Dilution	Slurry Treatment Rate	Package Size	Product Weight
Soybeans	1.5 fl. oz./cwt	1.5 fl. oz./cwt	3.0 fl. oz./cwt	2 x 2 gal 30 gal	12.02 lbs./gal

*Other legumes listed on label



WUXAL® TERIOS SEED TREATMENT

A nutrient suspension for seed treatment with nitrogen, phosphorus, copper, manganese, molybdenum and zinc. The composition of Wuxal Terios meets the specific requirements of cereals in the early stages of development for improved seedling emergency and early plant vigor. Wuxal Terios is especially beneficial to seedling establishment and growth in stressful environments. Wuxal Terios suspension creates an even distribution on the seed surface and sticks well on the seeds. It can be used in combination with other seed treatments like fungicides and insecticides.

Crop*	Dosage Rate	Water Dilution	Slurry Treatment Rate	Package Size	Product Weight
Wheat	2.30 fl. oz./cwt	2.30 fl. oz./cwt	4.60 fl. oz./cwt	2 x 2 gal 30 gal	11.84 lbs./gal

*Other small grains listed on label



SEED ENHANCEMENTS



HYDRALINK™ SEED-APPLIED WATER MANAGEMENT

A **seed-applied** water management product formulated to provide an optimal moisture environment around the seed for improved germination and emergence, stand establishment and yield.

Use Rates	Package Size	Product Weight
Corn: 1.0 – 2.0 fl. oz. per 100 pounds of seed (0.5 – 1.0 fl. oz. per unit of seed)	2 x 2.5 gal	9.35 lbs per gal
Soybean: 1.0 – 1.5 fl. oz. per 100 pounds of seed (0.5 – 1.0 fl. oz. per unit of seed)		



PRISM™- SPC2020 SEED COATING POLYMER

PRISM SCP2020 is a seed coating polymer designed for maximum reduction of dust-off and rub-off of active, improved seed flow and plantability. The product can be applied with all seed treatment pesticides or other seed-applied products through commercial seed-treating equipment.

Use Rates	Package Size	Product Weight
Field or seed corn - Use 0.5–1.5 mg /kernel or 1.2–3.5 fl oz per 80,000 kernel bag (assumes of 1,600 seeds/lb). Specific rate dependent on rate of pesticide applied. Soybean - 0.5-1.0 fl oz per 100 lb of seed Cereals - 1.0-3.0 fl oz per 100 lb of seed Use on all other seed types at a rate of 1-6fl oz/cwt. Specific rate will vary based on seed type and other products applied	2 x 2.5 gal	9.43 lbs per gal

INOCULANTS



RIZOLIQ® LLI SOYBEAN INOCULANT

RIZOLIQ® LLI is a state-of-the-art technology that assures longer bacteria survival on soybean seeds up to 220 days under normal storage conditions. It maximize the natural capability of soybeans to generate nitrogen so growers can better manage crop inputs and enhance yield.

Use Rates	Packaging	Product Weight
3.84 fl oz/cwt	44 unit bladder 200 unit bladder	0.129 lbs/unit



RIZOLIQ® TOP SOYBEAN INOCULANT WITH INTERNAL PROTECTOR

Launcher TOP uses osmo-protector technology (TOP) to strengthen the cell wall of the bacteria, leading to longer survival on the seed and better performance in the field. This single component, low use rate product allows for up to 20 days on-seed time with common seed treatment products.

Use Rates	Packaging	Product Weight
2 fl. oz./cwt	400 unit bladder	18.75 lbs/100 units

PRISM™ - SCARLET SEED COLORANT

Specifically formulated to provide unsurpassed color characteristics necessary to enhance seed appearance and create unique identification for treatments and varieties. Available colors are scarlet, azure, violet and emerald.

Colorant Required per 100 lb. (45 kg) of Seed*		Package Size	Product Weight
Large Light Seed* Corn, Soybeans, Wheat, Sorghum	0.2 – 0.5 fl. oz. 6 – 15 ml	2 x 2.5 gal	9.26 lbs per gal



PRISM™ - AZURE SEED COLORANT

Specifically formulated to provide unsurpassed color characteristics necessary to enhance seed appearance and create unique identification for treatments and varieties. Available colors are scarlet, azure, violet and emerald.

Colorant Required per 100 lb. (45 kg) of Seed*		Package Size	Product Weight
Corn, Soybeans, Wheat, Sorghum	0.2 – 0.5 fl. oz. 6 – 15 ml	2 x 2.5 gal	9.5 lbs per gal



PRISM™ - EMERALD SEED COLORANT

Specifically formulated to provide unsurpassed color characteristics necessary to enhance seed appearance and create unique identification for treatments and varieties. Available colors are scarlet, azure, violet and emerald.

Colorant Required per 100 lb. (45 kg) of Seed*		Package Size	Product Weight
Corn, Soybeans, Wheat, Sorghum	0.2 – 0.5 fl. oz. 6 – 15 ml	2 x 2.5 gal	9.9 lbs per gal



PRISM™ - VIOLET SEED COLORANT

Specifically formulated to provide unsurpassed color characteristics necessary to enhance seed appearance and create unique identification for treatments and varieties. Available colors are scarlet, azure, violet and emerald.

Colorant Required per 100 lb. (45 kg) of Seed*		Package Size	Product Weight
Corn, Soybeans, Wheat, Sorghum	0.2 – 1.0 fl. oz. 6 – 30 ml	2 x 2.5 gal	9.45 lbs per gal



*Other seed types listed on label

