ZINC SOLUTIONS

Zn

THE IMPORTANCE OF ZINC

Zinc is one of the micronutrients required for plant growth and development. Zinc is essential for protein synthesis, seed and grain formation, plant maturity, growth regulation, and the formation of enzyme systems. Zinc is immobile in the soil, so a constant supply is needed for optimum growth.

Zinc deficiencies usually occur in heavily cropped fields, sandy soils, soils that have low organic matter with high and low pH levels, newly terraced fields or cold and wet soils. Zinc deficient soils cause stunted plant growth and ultimately a decrease in yield.

Product & Analysis	Features	Compatibility	Crops	Application Method	Use Rate (per acre)	Density (lbs/gal)	Freezing Pt. (°F)
EDTA Chelated Zinc 9% 9.0 Zn	• Only option for in-furrow zinc application • Fully-chelated solution • Contains essential nutrients for quick emergence and rapid zinc deficiency correction	Designed for use in all liquid fertilizers and suspensions	Field & row crops; vegetables	In-furrow, 2x2	1-2 quarts	10.9	< -4
				Foliar	1-2 pints		
			Tree & bramble fruits; nut trees; other fruits	Soil	1-2 quarts		
				Foliar	1 pint/100 gal water		
Tri Z™ 12-0-0 + 12.0 Zn	• Contains 3 different sources of zinc: EDTA, sulfate, and ammonium chloride • Provides immediate availability and sustained release • Excellent storage characteristics; can be mixed to overwinter	APP, UAN, ATS, and starters up to 50% ortho	Field & row crops; vegetables	2x2	1-3 quarts	10.4	< -4
				Broadcast	4-6 quarts		
Tri Z™ Pro 14-0-0 + 5.0 S, 10.4 Zn	• Similar features and benefits as Tri Z PLUS contains synergistic formulation of zinc and ammonium acetate • Promotes vigorous root development	APP, UAN, ATS, and starters up to 50% ortho	Field & row crops; vegetables	2x2	1-3 quarts	10.6	-22
				Broadcast	4-6 quarts		
Nulex® Ammoniated Zinc 15% 13-0-0 + 15.0 Zn	• Up to ten times more effective than dry broadcast zinc • A source of nitrogen and zinc • Promotes healthy plants and higher yields	APP, UAN, ATS, and starters up to 30-35% ortho	Field & row crops; vegetables	2x2	0.75-9 pints	10.8	10
Citric Chelated Zinc 10% 2.0 S, 10.0 Zn	• Safe for foliar application • May be used as an additive for liquid fertilizer • Splash-and-go tank mix foliar zinc	Compatible with most pesticides. May be used as an additive with some liquid fertilizers.	Field & row crops; vegetables	2x2	0.5-4 quarts	10.3	32
				Foliar	1-2 quarts		
UltraMate® Zn 12% Humic Acid 3-0-2 + 1.0 S, 3.72 Zn	• Stabilizes nitrogen, reducing volatility while increasing utilization of nutrients that it is tank-mixed with • Provides zinc to growing plants for a longer period of time • Sulfonated potassium humate liquid with the additional benefits of zinc	Designed for use in all liquid fertilizers and suspensions	Field & row crops	Pre-plant	1 gallon	9.7	32
				Broadcast	1 gallon		
				Sidedress	1 gallon		

ALSO AVAILABLE: EDTA Chelated Zinc 6%, Nulex Ammoniated Zinc 10% and 20%.

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For more information on these products and other available products, visit **AndersonsPlantNutrient.com**

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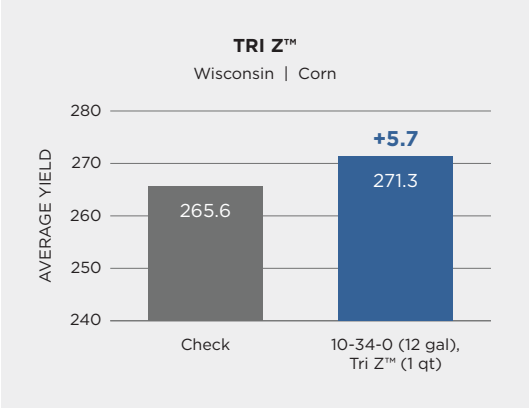
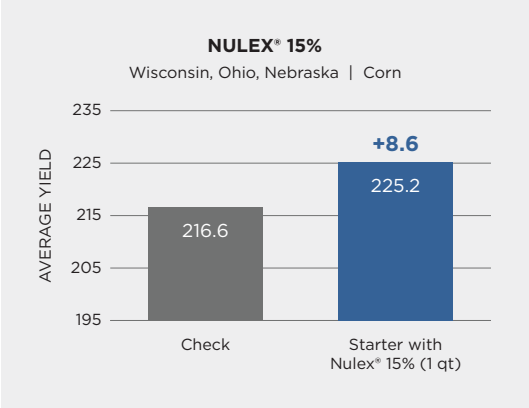
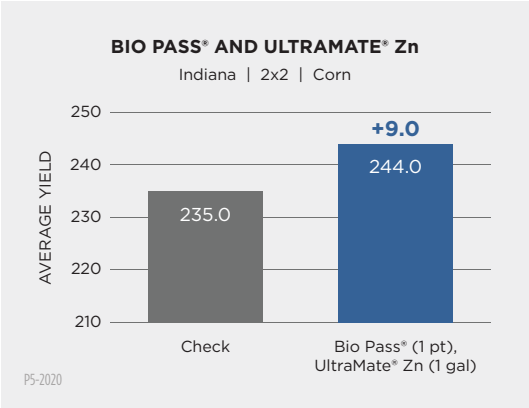


In a trial conducted in Wisconsin in 2013, a 5.7 bu/A increase in yield was observed with the addition of Tri Z and 10-34-0 at planting.



An average of 5 trials conducted in Wisconsin, Ohio, and Nebraska in 2016 showed an average of 8.6 bu/A increase compared to the check.



In a trial conducted in Indiana in 2020, a 9.0 bu/A increase in yield was observed with the addition of UltraMate Zn and Bio Pass at planting.

ROLES OF ZINC

- Aids in synthesis of plant-growth substances and enzyme systems
- Essential for promoting certain metabolic reactions
- Availability decreases as soil pH increases

ZINC DEFICIENCY SYMPTOMS

Corn: white to yellow bands begin at the base of the leaf; midrib and leaf margins remain green

Soybeans: yellow and possibly bronze coloration of leaf edges and tips

*Always tissue test to ensure correct diagnosis of nutrient deficiency.

ZINC DEFICIENCIES CONTRIBUTE TO:

- Poor root development
- Stunted growth
- Shortened internodes
- Delayed silking and tasseling

Zinc deficient corn
IPNI | Source: S. Srinivasan

Zinc deficient soybeans
IPNI | Source: D. Whitney

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For more information on these products and other available products, visit **AndersonsPlantNutrient.com**

4R nutrient stewardship