

How important is Zinc?



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In this day of unbelievable costs of fertilizer products, we are all looking closely at the fertilizer products we are using and recommending. Do we really need that input or not?

In this case what about zinc?

Zinc is a small percentage of the fertilizer package, but is a very important component and is essential in crops for several reasons. Zinc is important in the regulation of many enzymes in the crop plant. These enzymes are essential to energy production for the plant. The plant's ability to regulate protein use is also highly affected by the zinc levels available.

The most visual function of zinc is its role in the regulation of tryptophan produced in crops. Tryptophan is an amino acid that is involved in the growth control regulation of plants. Zinc deficient plants will usually show stunted growth or irregularities.

In corn, zinc deficiency usually shows up when the corn seedling is 10-21 days emerged from the ground. Broad bands of chlorotic stripping will occur down the leaves, usually running parallel to the midrib. The plants will also be stunted in size and seem to have shortened internodes on the stalk. Leaf edges will have a crinkled pattern with purplish coloring. This most often occurs in cold, wet spring weather on low organic matter soils. Root development is also affected which in turn reduces the plants ability to uptake other nutrients effectively. Zinc deficient plants also develop more slowly, which may mean wetter corn in the fall.

In soybeans, zinc deficiency is displayed by dwarf sized, internodes being packed close together, and a lower number of beans per pod.

Even though zinc is not as big of a player in your fertilizer line up, as perhaps nitrogen and phosphorus, it is still essential to have adequate levels of zinc available for high end crop production. Discuss zinc with your Servi-Tech crop specialist when you're looking over soil samples through this crop planning season.