



## *Sunland Analytical*

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### **Small Without Zinc**

As with other micronutrients a deficiency may appear as yellow leaves with dark green veins (interveinal chlorosis), but interestingly descriptions of crop after crop use adjectives like small, dwarfed, stunted in their descriptions of the effects of Zinc deficiency. Of course, Zinc deficiency causes decreased yield and in extreme cases it causes total crop failure or poorly growing, unattractive landscape plantings. Where agricultural crops are of consideration, plant tissue analysis is appropriate to insure identification of the limiting micronutrient. Where the symptoms are distinct enough symptoms in landscape settings may be overcome with a small application of the appropriate micronutrient.

Zinc is utilized by the plants to aid various enzymatic reactions and as such is absolutely required, but only in very small amounts. Soil analysis indicating about 2 ppm of available Zinc provide adequate availability for most plants. Interestingly, different plants have different abilities to obtain Zinc from the soil, however, this value of 2 ppm is acceptable for most plants.

Zinc deficiencies are most prevalent in soils with pH above 6, typical of most soil in western States. The presence of adequate Zinc should be evaluated so that, relatively inexpensive, treatments can be employed prior to any problems.

A common remedy to a Zinc deficiency may be application of 5 to 10 pounds of Zinc sulfate per acre. In certain situations, the soil particles may bind Zinc and make it unavailable for plant uptake. In these cases, applications of chelated Zinc, which are not bound by the soil particles and are available to the plants, can be utilized.