



Zinc Deficiency in Tea (*Camellia sinensis*)

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Zinc (Zn) deficiency is an abiotic nutritional disorder that affects many plants. Soil zinc is taken up by the plant as a cation, Zn^{++} .

Symptoms

Youngest leaves are narrow, strap-like, erect, and often bunched together, forming a rosette at the apex of the stem. Leaf blades are yellowed, with margins that are a distinct pale yellow. Severely affected leaves are stunted and distorted with inward-curling margins. Apical growth and branch extension may slow on affected plants, and severely affected plants may not put on much new growth at all.

Management

Zinc deficiency can be corrected by amending the soil. Zinc sulfate (22–26% Zn) is a quickly available source, and zinc oxide (70–80% Zn) is slowly available. Poultry and swine manure are good organic sources of zinc.

Zinc chelate (9–14% Zn) can be applied to the foliage and is rapidly available to the plant.

Phosphorus build-up in the soil from excessive phosphate fertilizer applications can induce zinc deficiency.

