

Deficiencies and disorders- Banana

Nitrogen Deficiency Symptoms :

Nitrogen deficiency causes slow growth and paler leaves with reduced leaf area and rate of leaf production. Leaf petioles short, thin and compressed, thin profuse roots and lesser number of suckers are produced due to lack of N.

Corrective Measure :

Foliar spray of urea 2% at weekly intervals till disappearance of the deficiency symptom.

Phosphorus Deficiency Symptoms :

The deficiency of P causes complete cessation of elongation, at a height of about two feet resetting of leaves with older leaves becoming increasingly irregularly necrotic, leaf production is reduced, and marginal chlorosis and premature death are caused. P deficiency causes a blue or dark green coloration of leaves.

Corrective Measure :

40-60 g SSP / plant. Entire quantity of phosphorus fertilizer should be applied at the time of last ploughing or applied at the time of filling the pits.

Potassium Deficiency Symptoms

Deficiency of potassium causes marked reduction in growth, interval profusely smaller, premature yellowing of plant. Purplish brown patches appear at the base of the petioles and in severe cases the centre of the corm may show area of brown, water soaked disintegrated cell structures. Fruits are badly shaped, poorly filled and unsuitable for marketing. Splits develop parallel to the secondary veins and the lamina folds downwards, while the midrib bends and fractures, leaving the distal half of the leaf hanging.

Corrective Measure

Foliar spray of KCl 2% at weekly interval till the symptom disappear.

Calcium Deficiency Symptoms

Characterized narrow band of marginal chlorosis of leaves turning into necrotic fallow. Leaves become small, growth shunted. Youngest leaves with thickened secondary veins. Splitting and curling of leaf edges. Distal end of midrib interveinal and marginal chlorosis.

Corrective Measure

Application of gypsum @ 250Kg/ha.

Magnesium Deficiency Symptoms

Magnesium deficiency symptoms show green banding around the margin and next to the midrib. Leaves turn yellowish with brown goods on the leaf margin. Plant height reduced marginal yellowing of leaf margin extends towards the midrib. Purplish mottling of leaf petiole and malformation of leaves. Fruits do not ripen well and become tasteless.

Corrective Measure

Spraying MgSO₄ 5% or application of dolomite lime stone 3t/ha effectively corrects the deficiency.

Sulphur Deficiency Symptoms

Deficiency causes chlorosis and delaying of green colour in newly emerging leaves, thickening and leaf puckering, reduced plant growth and growth and reduced leaf size. The heart leaf becomes white and leaf blades become very soft and tear easily.

Corrective Measure

Application of ammonium sulphate @ 100g/plant.

Boron Deficiency Symptoms

Newly emerging leaves are malformed. Plants show shunted growth. Chlorotic streaks appear perpendicular to the veins. Incomplete leaf formation and inhibition of fruit and flower. Deficiency of boron may results in reduction in weight and size of the bunch and it will effects the proper filling of the bunch.

Corrective Measure

Soil application of 20 g Borax per tree. Borax acid 0.2% foliar sprays on 4th and 5th month after planting.

Copper Deficiency Symptoms :

Plants show overall droopy appearance with shortened intervals between petiole. Size of leaves reduced.

Corrective Measure

Application of 20 Kg CuSO₄/ha a foliar spray of 2% CuSO₄.

IronDeficiency Symptoms :

Iron deficiency has been recorded in alkaline soils and is identified by interveinal chlorosis of young leaves.

Corrective Measure

Soil application of FeSO₄ 5/g/ha or foliar spray of 0.5% FeSO₄ at weekly intervals.

Manganese Deficiency Symptoms :

Marginal chlorosis of young leaves, which later turn brown. Fruits with raised spots which are dark brown on black in colour. Leaves give striated appearance from the edges.

Corrective Measure

Weekly foliar spray of 2% MnSO₄.

Zinc Deficiency Symptoms :

Deficiency appears in the young plants. Interveinal chlorosis of leaves with chlorotic stripes. Leaves appear papery whole in colour. Finger twisted, short, thinner and light green colour.

Corrective Measure

Application of 50 g/plant ZnSO₄ at time of planting is recommended or foliar application of ZnSO₄ at 3 g/litre + urea (5g per litre) + 10 ml non ionic sticker in 20 litres of water. The above prepared solution is sprayed at 45 and 60 DAP.