

Banana

Manuring & Fertilization

The fertilizer dose depends upon the fertility of soil and amount of organic manure applied to the crop. For a good yield, 40-50 t/ha of well-decomposed FYM is incorporated into the soil. The recommended fertilizer dose for optimum yield is as follows -

Varieties	Quantity of Fertilizers (g/plant)								
	3 rd month			5 th month			7 th month		
	Urea	SSP	MOP	Urea	SSP	MOP	Urea	SSP	MOP
Poovan, Rasthali & Karpuravalli	140	155	130	230	155	320	90	---	175
D.Cavendish, Robusta & Nendran	15	155	130	250	105	320	150	---	225
Other varieties	110	110	130	155	110	300	90	---	160

(Source : NRC Banana)

Fertilizer dosage for **tissue culture** banana is given below -

Days after Planting	Fertilizer Dose (g/plant)		
	Urea/ Ammonium sulphate	SSP	MOP
30	45/100	125	50
75	90/195	125	85
110	110/245	125	85
150	110/245	125	100
180	90/195	125	100
At bunch emergence	- / -	-	85

Nutritional Deficiency :

Nitrogen

Leaves of all ages become pale green. Mid ribs, petioles and leaf sheaths turn reddish pink and rosette in appearance. Plantations with poor root growth exhibit such symptoms. Bunch weight and fruit quality is affected.

Control : Application of urea (300g/plant) followed by irrigation is recommended.

Phosphorus

Plants show stunted growth with poor root development. Old leaves show saw tooth marginal chlorosis, curling of leaves, breaking of petioles and bluish green colour of younger leaves.

Control : Application of DAP (50g/plant) followed by irrigation is recommended.

Potassium

The deficiency symptoms include orange yellow colour of old leaves, scorching along the margins, reduction in total leaf area, curving of midribs etc. Choking of leaves delay flower initiation leading to reduction in yield and quality.

Control : Spraying Potassium Sulphate (1%) solution on the leaves is recommended.

Calcium:

The deficiency symptoms include deformation or absence of leaf lamina (spike leaf), marginal leaf necrosis and thickening of veins.

Control : Application of lime (50g/plant) followed by irrigation is recommended.

Magnesium

Yellow discolouration is observed in the midblade and midrib portion however the margins of the leaf remain green. Purple mottling of the petioles, marginal necrosis and separation of leaf sheaths from the pseudostem is also seen.

Control : Application of Magnesium Sulphate (25g/plant) followed by irrigation is recommended.

Sulphur

The deficiency symptoms include yellow or white appearance of young leaves, necrotic patches on the leaf margins, thickening of veins, stunted growth and small or choked bunches.

Control: Application of complex fertilizer (20:20:0:15) @ 20 g/plant followed by irrigation is recommended.

Manganese

Narrow green edge appears at the leaf margins of second or third youngest leaf, which further spreads along the main veins towards the midrib. However, the interveinal areas remain green giving comb tooth appearance.

Control : Spraying Manganese Sulphate (0.5%) on the leaves is recommended.

Zinc

Symptoms appear mostly in limed soils or soils with high pH. Young leaves become smaller in size and more lanceolate in shape. In the furling leaf high amount of anthocyanin pigmentation appear on its underside. The unfurled leaf has alternating chlorotic and green bands. Fruit is light green, twisted, short and thin.

Control : Spraying Zinc Sulphate (0.5%) on the leaves is recommended.

Iron

The younger leaves turn yellow or white.

Control : Spraying Iron Sulphate (0.5%) along with Urea (1%) on the leaves is recommended.

Copper

Both young and old leaves show symptoms of chlorosis and curve towards the base, which gives an umbrella like appearance to the plant.

Control : Spraying Copper Sulphate (0.5%) on the leaves is recommended.

Boron

Deficiency symptoms include reduced leaf area, curling of leaves, lamina deformation, appearance of white stripes perpendicular to the veins on the lamina of young leaves, thickening of secondary veins and inhibition of root and flower formation.

Control : Application of Borax salt (25 g/plant) in the soil around the root zone of the plant is recommended.