

Element	Deficiency Symptoms	Quantity	
		Foliar(%) application	Soil application
Zinc	Terminal leaves show yellow blotches in between veins while the green colour persists along the midrib and lateral veins. Leaves are small, narrow, pointed and chlorotic. Affected twigs are erect, bushy. Chlorotic leaves drop off-early leading to die back of twigs. The tree gets stunted. Fruits are small, malformed and insipid.	0.5-1.2 Zinc sulphate	Zinc sulphate @ 500 g/tree
Iron	Deficiency results in network of green veins against light green or yellow background. In extreme cases, entire leaf becomes chlorotic. Reduction on fruit size may occur. This is a problem in alkaline soils	0.5-0.9 Ferrous Sulphate	FeEDTA @ 20g/plant (acidic soils) Fe EDTA @ 50 g/ plant (alkaline soils)
Manganese	The characteristic symptoms of deficiency are the green midribs and veins with green bands and light green interveinal areas. The leaf size is not reduced. Symptoms are more prominently seen in the shady side of the tree. Pronounced leaf symptoms are seen on mature leaves.	0.2-0.5 Manganese sulphate	Manganese sulphate @ 5-10 kg/ha
Copper	A deficiency of copper results in dark green leaves borne on S-Shaped twigs. Dieback of twigs is observed. Slits occur on the bark through which gum exudes. Fruits show gum pockets around central pith. Gum exudation can be seen on the rind also.	0.5-0.9 Copper sulphate	Copper sulphate @ 2.5-5.4 kg/ha
Boron	Trees produce distorted leaves. Mature leaves show corking or splitting of veins and midrib. Leaves are twisted. Fruits tend to be hard and malformed. Brown gum pockets are found embedding in the juice sacs.	0.2-0.4 Boric acid	Borax @ 200 g/plant or 10 kg/ha
Molybdenum	Deficiency causes yellow spots on leaves. These spots initially appear as water soaked areas, which gradually develop into yellow spots. Gum formation occurs on the underside of the leaf. In severe cases, defoliation occurs.	0.2 Sodium molybdate	-

In general, foliar sprays are applied when young leaves grow half to two thirds of normal size in different species. The sprays can be done during March-April or August-September in north India or in March-April in south India. Normally, 2 sprays at 15 days intervals are recommended while in acute cases, 3 sprays can be given. Soil application should be done in circular bands (50 cm) at 50-75 cm away from the trunk. Combined foliar sprays are generally recommended when severe deficiency symptoms are noticed.