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# Center for Smart Agriculture

## Hi Tech Fruit Culture



**Module 4: Nutrient Management**  
**Session 1: Nutrition in Mango and Guava**



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## Nutrition in mango

- The nutritional requirement of mango varies with the region, soil type and age.
- 25kg FYM/Compost is applied before planting and same quantity is applied every year before application of fertilizers.
- A dose of 73g N, 18g P<sub>2</sub>O<sub>5</sub> and 68g K<sub>2</sub>O<sub>5</sub>/ year of age is given from first to tenth year and thereafter a dose of 730g N, 180g P<sub>2</sub>O<sub>5</sub> and 680g K<sub>2</sub>O<sub>5</sub> should be applied in 2 split doses during **June-July and October** respectively.



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- Spraying of zinc sulphate (0.3%) during February, March and May is recommended to correct the zinc deficiency.
- Spraying of Borax (0.5%) after fruit set twice at monthly intervals and 0.5% manganese sulphate after blooming corrects boron and manganese deficiencies respectively.
- The application of micronutrients is not recommended as a routine. Need based supplementations are essential when these become limiting factor for production.
- It is advisable to apply micronutrients through foliar sprays. Ammonium sulphate should be given before flowering.



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## **Nutrition guava**

- It responds well to the application of inorganic fertilizers along with organic manures.
- Therefore for the bearing trees, 50 kg of FYM and one kg each of N, P and K are applied per tree in two equal split doses, once during March and again during October.
- It also responds well to foliar spray of nutrients.
- spraying of urea 1 % + Zinc 0.5% twice a year during March and October increase the yield.





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- During the bahar treatment i.e. when the irrigation is cut off, along with FYM, (900:600:600g of NPK) half dose of nitrogen and full dose of phosphorus and potassium are to be given.
- The remaining half of N is given 1 to 1.5 months after bearing of the fruits.
- Leaf analysis in guava can be carried out using 3rd pair of recently matured leaves during bloom stage (August or December).
- Guava sometimes suffers from deficiency of micronutrients.
- Hence, a mixed spray containing  $ZnSO_4$ ,  $MgSO_4$ ,  $MnSO_4$  @ 0.5% and  $CUSO_4$  and  $FeSO_4$  @ 0.25% plus a wetting agent @ 1 ml per 5 litre of solution.



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# Thank you

