

# Grafting of grape vines

Being a nutritious crop, the quality and quantity production of grapes is based on the technology used, climatic conditions and variety of the crop.

The garden is decided and structures are erected before planting and spacing is done at 10×6 ft or 10×5 ft. Grapes can be propagated by stem cutting however, rooted cuttings are planted from nurseries to the main field. Root system is strong and performs well with less water and avoids absorption of poisonous salts.

## Crop management

The crop has resistance to nematodes and synthesises good amount of cytokines which help in better fertility of the flower buds. Grafted plants give 20-30% higher yield and this calls to nourish the root stalk in the main field.

Additionally, flood in water in the garden once in a while for better root spreading and this is followed by regular drip irrigation. Leave on 2 stalks only after 4 months of planting and give support for upward growth and tie with thread.

Furthermore, correct Mg and Zn deficiencies in early stage by foliar spray. Root stalk are grafted by cleft grafting method and in this, select grownup scions with brown skin of 4 inch length of required variety for grafting.

Root stalk plant with 6 months of growth in main field are retained and rest of growth is cleared. Make slant cut of 2 inch length on both sides of scion and get off shoot of root stalk at 1.5 ft height and make a slip of 2 inch length.

Keet scion in slit and tie with plastic tape to make joint air tight. Graft start to sprout in 3-4 weeks and after 45 days of successful grafting, leave only one good graft at one spot.

For better root and vine growth, grafting in main garden is advised.

Finally, success of grafting is better when temperature is at 25-30 degrees centigrade with more than 90% relative humidity and also depend on skill of the grafter and care of plant after grafting.