

**LEC.11 GRAPES – NUTRIENT DISORDERS, CORRECTIVE MEASURES,
GROWTH REGULATORS, PHYSIOLOGICAL DISORDERS, PESTS
AND DISEASES AND MANAGEMENT PRACTICES**

Pests

Nematode

Carbofuran – 60 g/vine a week before pruning and irrigated profusely. The soil should not be disturbed to atleast 15 days. Application of neem cake 200 g/vine also controls nematode. We can afforded for application of *P. fluorescens*.

Flea beetles

Phosalone – 2ml/lit after pruning and followed with 2 or 3 sprayings.

Thrips: Dimethoate – 2 ml/lit

Mealy bug: Monocrotophus – 2 ml/lit

Diseases

Powdery mildew: Sulphur dusting @ 6-12 kg/ha

Downy mildew: Spray 1% BM

Ripening

To get uniform ripening bunches are sprayed with 0.2% K chloride at 20th and 40th day after berry set and clusters of seedless varieties are dipped in 25 ppm GA (25 mg/lit) at calyptra fall stage and repeated again at pepper stage to increase the size of berries.

Yield

Seed less : 15 t/ha/yr

Muscat : 30 t/ha/yr

Pachadroksha: 40 t/ha/yr

Anab-e-shahi

and Arka hybrids : 20 t/ha/yr

Grapes should be harvested only after ripening. The heat requirement of most of varieties ranges from 2900 to 3600 units.

The grape berries can be kept without spoilage for 7 days at room temperature. Grapes can economically be stored upto 40-45 days in cold storage. The optimum storage temperature recommended is -2 to -1.5°C.

Raisins from grapes form an important by product industry in several grape growing countries in the world. Grapes of 17° brix and above are used for raisin making while 20-23° brix is the standard.