

## WEATHER DATA FOR THE PREVAILING WEEK

(Assumption: Fruit Pruning date- 15/09/2019)

### I. WEATHER DATA FOR THE PREVAILING WEEK

**Thursday (9/1/2020) – Thursday (16/1/2020)**

Location	Temperature (°C)		Possibility of Rain	Cloud Cover	Wind Speed (Km/hr) Min-Max	R H%	
	Min	Max				Min	Max
<b>Nashik</b>	12-17	26-31	<b>Nashik, Pimpalgaon, Ojhar, Palkhed, Dindori, Vani</b> Sun- Drizzling.	Clear	01-20	32-44	70-91
<b>Pune</b>	15-18	28-31	<b>Pune, Phursungi, Narayangaon, Junnar, Narayangaon, Junnar</b> Sun- Drizzling. <b>Loni Kalbhor, Uruli Kanchan, Yavat, Patas, Supa, Baramati</b> Tue- Drizzling.	Clear to Partly Cloudy	01-18	34-42	72-91
<b>Solapur</b>	18-19	30-32	<b>No Rain.</b>	Clear to Partly Cloudy	04-18	28-44	61-79
<b>Sangli</b>	16-19	30-32	<b>No Rain.</b>	Clear	02-20	32-41	73-88
<b>Bijapur</b>	18-19	30-32	<b>No Rain.</b>	Clear to Partly Cloudy	04-20	25-43	65-82
<b>Hyderabad</b>	16-19	28-31	<b>Hyderabad, Medchal, Zahirabad</b> Thu- Drizzling.	Clear to Mostly Cloudy	02-12	36-58	76-99

Note: Above weather information is summary of weather forecasting given in following websites <http://www.imd.gov.in/>, <http://wxmaps.org/pix/prec6.html>, <http://www.fallingrain.com/world/IN/>, <http://www.wunderground.com/>, <http://www.bbcweather.com-weather/1269750>, etc.

## **II. a) Days after pruning: 116**

**b) Expected growth stage of the crop: Berry softening**

## **III. Water management (Dr. A.K. Upadhyay)**

Expected pan evaporation: 3.0 to 5 mm

### **Amount of irrigation advised (Dr. A.K. Upadhyay):**

1. Possibility of drizzling is there in some places. Withhold irrigation if soil is in waapsa condition.
2. From Berry development stage onwards till maturity, apply irrigation through drip @ 5,100- 7,600 L/ acre/ day for Nasik and Pune region and from 7,600 – 8,500 for Sangli, Solapur, Hyderabad and Bijapur region. Remember that if the soil is at field capacity (wapsa) then donot irrigate.
3. Practice mulching to keep the bunds moistened. This will reduce the salinity build up in the root zone due to evaporation of the moisture from the surface of the bund.
4. Flooding the vineyard is not advised as it will lead to wastage of water. Concentrate in the root zone only.

## **IV. Soil and Nutrient management (Dr. A.K. Upadhyay)**

### **Berry Development stage:**

1. If the berry size is from 2-4mm, spray calcium @ 2g Calcium Chloride or 0.5 g Ca chelate or 0.75g Calcium Essence per litre. Target sprays immediately after GA application (preferably next day) for better absorption.
2. If the berry size is from 5-8mm, spray calcium & 2g Calcium Chloride or 0.5 g Ca chelate or 0.75g Calcium Essence per litre. Target sprays immediately after GA application (preferably next day) for better absorption.
3. In the calcareous soil, spray magnesium sulphate @ 3g/L on the vines followed by fertigation of magnesium sulphate @ 10kg/acre from setting till 6-8 mm berry stage.

4. After 8-10 mm berry size, start application of nitrogen in the form of ammonium sulphate @ 25kg /acre in 4 splits in calcareous soil and as urea @ 15 kg/acre in other soils in 3 splits. Follow this up with Sulphate of potash or 0-0-50 @ 25 kg/ acre in 3-4 splits for next two weeks.
5. In calcareous soil, apply zinc sulphate @ 10 kg/acre along with Ferrous sulphate @ 10kg/ acre after 8-10 mm berry size and before veraison initiation.

### **Ripening to Harvest stage:**

1. Apply Sulphate of potash or 0-0-50 @ 25 kg/ acre in 3-4 splits for next two weeks. Follow this up with Magnesium sulphate @ 10 kg/acre in two splits. Spray Magnesium sulphate in calcareous soil.

### **V. Requirement of growth regulators (Dr. S.D. Ramteke)**

NA

### **VI. Canopy management (Dr. R.G. Somkuwar)**

#### **General Practices to be followed**

#### **Steps for establishing new vineyard:**

The action for establishment of new vineyard to be initiated. Following steps to be followed before planting of rootstock.

- a) Soil and water testing: This will help to know the present status of soil and water of the field where the planting is to be taken.
- b) Levelling of land and marking: This will help for uniform distribution of water through drips and also ease of cultural operations.

- c) Spacing decision: The spacing followed is depending upon the type of soil available in the field. In light soil, since the vigor is reduced, the spacing of 9 feet between two rows and 5 feet between two vines is sufficient. In heavy soil, the vine impart more vigor. Considering this, the spacing to be maintained as 10 feet between two rows and 6 feet between two vines.
- d) Row direction: This is important since uniform sunlight harvesting is required for fruit bud differentiation. In bower trained vines, the direction has no meaning. However, in flat roof gable trained vines, the row direction should be north-south.
- e) Rootstock planting can be taken up during second week to third week of January.

## VII. Disease management (Dr. Sujoy Saha)

Days after pruning	Risk of diseases			
	Downy mildew	Powdery mildew	Anthracnose	Others (specify)
116	Nil	Moderate	Nil	Nil

Application of Hexaconazole @1ml/L or Difenconazole@ 0.5ml/L or tetraconazole @ 0.75 ml /L or Metrafenone 50% SC @0.25ml/L should be applied if the crop is less than 60 days old for the control of powdery mildew. If the crop is more than 60 days, application of sulphur @2g/l which will take care of powdery mildew. Regular application of Ampelomyces quisqualis should be done @5-6g/L at regular intervals for control of powdery mildew.

## VIII. Insect and Mite Pest Management (Dr. D.S. Yadav)

### Growth Stage: Berry development stage after October pruning

- Bunch-weber may be seen infesting bunches at some places. It is a minor pest so far. The most effective way to control them is to collect and kill them by hand as insecticides may not come into contact with it. The caterpillars on leaves are also needs to be

killed as they can go inside the bunch later on. Spraying of emamectin benzoate 5 SG @ 0.22 gram per litre water (pre harvest interval 25 days) at night is effective to manage them.

- Entomogenous fungus such as *Metarhizium*, *Beauveria* and *Lecanicillium* can be used for plant wash at 15 days interval to reduce mealybug populations. If, insecticide application seems inevitable, the only buprofezin 25 SC @ 1.25 ml/L (PHI 65 days) water may be used for management of mealybugs as this insecticide does not harm beneficial organisms in the vineyard.
- Sulphur 80 WDG @ 1.5-2.0 g/L or Abamectin 1.9 EC @ 0.75 ml/L (PHI 25 days) or Bifenazate 22.6 SC @ 0.5 ml/L (PHI 25 days) water may be applied if mite infestation is observed.