

## WEATHER DATA FOR THE PREVAILING WEEK

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

### I. WEATHER DATA FOR THE PREVAILING WEEK

Thursday (20/2/2020) – Thursday (27/2/2020)

Location	Temperature (°C)		Possibility of Rain	Cloud Cover	Wind Speed (Km/hr) Min-Max	R H%	
	Min	Max				Min	Max
Nashik	17-19	33-36	No Rain.	Clear	0-18	15-20	46-59
Pune	18-21	34-36	No Rain.	Clear	0-15	15-22	44-56
Solapur	20-23	35-36	No Rain.	Clear	5-19	18-26	46-63
Sangli	19-22	35-36	No Rain.	Clear to Partly Cloudy	1-15	18-25	49-62
Bijapur	19-23	33-36	No Rain.	Clear to Partly Cloudy	6-19	17-27	44-73
Hyderabad	17-20	32-34	Hyderabad, Medchal Next Thu- Drizzling.	Clear	4-17	29-43	85-99

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: 140+**

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

**III) Nutrient and Irrigation Management (Dr. A K Upadhyay)**

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

**Expected pan evaporation: 6 to 8 mm**

1. From Veraison stage onwards till maturity, apply irrigation through drip @ 10,200 – 11,900 L/ acre/ day for Nasik, Pune and Hyderabad region and 11,900 – 13,600 L/acre/day for Sangli, Solapur and Bijapur region.
2. Remember that if the soil is at field capacity (wapsa) then donot irrigate.
3. Flooding the vineyard is not advised as it will lead to wastage of water. Concentrate irrigation water application in the root zone only.
4. As the temperature is rising, donot withhold water during ripening to harvest stage as this will lead to loose bunch, thereby affecting the quality of produce.

### **Soil and Nutrient management**

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

1. Apply Sulphate of potash or 0-0-50 @ 25 kg/ acre in 3-4 splits for next two weeks. Total potassium application (SOP) should be approx. 60 kg/acre during this stage. Follow this up with Magnesium sulphate @ 10 kg/acre in two splits. Spray Magnesium sulphate in calcareous soil.

#### **Rest period:**

1. Apply 10kg Urea, 10 kg DAP and 10 kg Sulphate of Potash/ acre in two splits every 15-20 days.

#### **Foundation pruning:**

1. If planning for foundation pruning in next 10- 15 days, it is advised to get soil and water analysed for planning nutrient and water application schedule for foundation pruning season.

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

**NIL**

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

Since last week, the atmospheric temperature (minimum and maximum) is increasing. The effect of this condition on present growth stages and possible remedies are as below.

#### **Cluster drying:**

During the last month due to low temperature the progress in berry development was slow. If the berry is at softening stage, the increase in size will be minimum. At this stage the growers start either flood irrigation or increase the water in root zone. This results into activation of other roots thereby increasing the supply. However the balance between source: sink gets disturbed. The cluster starts drying at bottom. This happens under excess load condition. Application of micronutrients may not work to get the results. Generally calcium magnesium and potash is considered at this point. Hence, spray may be given. The dried clusters are to be clipped.

In other condition, the excess irrigation at this stage increases the humidity thereby activating the downy mildew inoculum. The results are seen in the form of rachis or pedicel blackening. This condition hampers the transportation of food to berries. In the severe condition, the berry shriveling is experienced. Generally the fungicide sprays are stopped, hence 2 to 3 spray of trichoderma@5ml per litre water can help to control this.

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

Days after pruning	Risk of diseases			
	Downy mildew	Powdery mildew	Anthracnose	Others (specify)
140+	Nil	Low	Nil	Nil

Prior to paper wrapping, an application of *Ampelomyces quisqualis* @5-6g/L or *Bacillus subtilis* @2g/L or Trichoderma formulations @ 4-5g/L may be given to the bunches for control powdery mildew. If not, the paper wrapping will provide a microclimate which will increase the disease.

## VI. Insect and Mite management. (Dr. D.S. Yadav)

Days after pruning	Risk of pests			
	Mealybug	Mite	Thrips/leafhopper	Caterpillar
150	High	High	Low	Low to Moderate

- Both mite and mealybug infestation may increase during next week.
- Spot plant wash with trisiloxane polyether surfactant @ 0.3 ml per litre water with 10-12 litre water per plant to remove mealybug and honeydew from plant and bunches in the field.
- Regular water sprays @ 1000 litres per acre to wash leaves to remove dust and mite webbings. Sulphur 80 WDG @ 1.5-2.0 g/L or abamectin 1.9 EC @ 0.75 ml per litre (PHI 30 days) or bifenazate 22.5 SC @ 0.5 ml per litre (PHI 30 days) water may be applied if mite infestation is observed.
- Hand pick and kill caterpillars if found in bunches.