

## WEATHER DATA FOR THE PREVAILING WEEK

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

### I. WEATHER DATA FOR THE PREVAILING WEEK

Thursday (13/2/2020) – Thursday (20/2/2020)

Temperature (°C)		Possibility of Rain	Cloud Cover	Wind Speed (Km/hr) Min-Max	R H%	
Min	Max				Min	Max
17-20	33-36	No Rain.	Clear	1-15	17-28	49-74
19-21	33-36	No Rain.	Clear to Partly Cloudy	0-13	18-30	48-76
19-22	34-37	No Rain.	Clear to Partly Cloudy	3-15	19-26	49-76
19-20	34-37	No Rain.	Clear to Partly Cloudy	1-14	19-29	53-75
19-22	33-36	No Rain.	Clear to Partly Cloudy	3-16	19-29	51-78
17-20	32-34	No Rain.	Clear to Partly Cloudy	1-14	26-34	66-97

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.bbweather.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

Expected pan evaporation: 5.0 to 7.5 mm

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

1. From Berry development stage onwards till maturity, apply irrigation through drip @ 8,500 to 10,200 L/ acre/ day for Nasik, Pune and Hyderabad region and 10,200 – 12,750 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. 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.

### IV. Soil and Nutrient management

#### Berry Development 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.
2. 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.
3. Apply Magnesium sulfate @10kg/acre in two splits

#### **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.

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

**NIL**

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

Under the present situation the temperature during day time is increasing. With the present situation, the following activities may be taken by the grape growers.

- 1) **New vineyard:** In the re-cut vineyard the bud sprouting will be converted into new shoots. There will be 4-5 new shoots. The apical shoot will grow at faster rate while the second shoot will be slow in growth. However, the chances of disease infection in the lateral shoot will be more. Considering this the second shoot to be selected while the apical shoot to be pinched at 3-4 leaf stage. This will help in easy and fast growth of new shoot. The chances of disease incidence will be less.  
The new vineyard grafted on Dogridge rootstock during the first year shows ferrous deficiency symptom. Hence from the stage of 5-6 leaf stage foliar spray ferrous sulphate @ 0.5g/L may be started. The concentration can be varied depending upon the growth stage.
- 2) **Old vineyard:** In this vineyard, application of excess irrigation either on the bund or flood in between the rows will disturb the balance in vine. This will result into either necrosis or blackening of rachis. This might be due to the activation of earlier infection of downy mildew or nutrient imbalance. Hence under this condition, irrigation of vineyard should be based on the requirement. This will help to control either downy mildew infection or cluster drying.

#### **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.

If there is a possibility of rain, chitosan@2g/L followed by *Ampelomyces quisqualis* @5-6g/L or *Bacillus subtilis* @2g/L or Trichoderma formulations @ 4-5g/L may be applied prior to paper wrapping. As diurnal range of temperature is high, there is a probability of pink berry occurrence. Before the berries move into veraison stage, proper paper wrapping needs to be done to avoid pink berry. For any incidence of powdery mildew application of sulphur@2g/L should be done.

**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

- ◆ 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.
- ◆ Sulphur 80 WDG @ 1.5-2.0 g/L water may be applied if mite infestation is observed.
- ◆ Hand pick and kill caterpillars if found in bunches.