# मौसम पूर्वानुमान आधारित साप्ताहिक सलाह Weather Forecast Based Weekly Advisory

(Assumption: Fruit Pruning date - 15/10/2017)

# I. Weather Data for the Prevailing Week

Thursday (01/02/2018) - Thursday (08/02/2018)

Location	Temperature (°C)		Possibility of Rain	Cloud Cover	Wind Speed	R H%	
	Min	Max			(Km/hr)	Min	Max
Nasik	17-20	31- 33	Nashik, Ojhar, Palkhed, Dindori, Vani, Pimpalgaon Kalwan, Devla, Baswant, Satana, Shirdi, Loni Niphad <b>Drizzling</b> – <b>Wed,Thu</b>	Partly Cloudy	00-12	18-25	45-51
Pune	17-20	26-34	Pune, Phursungi Narayangaon, Junnar Loni Kalbhor, Patas, Supa, Baramati Uruli Kanchan, Yavat – <b>Drizzling</b> – <b>Wed, Thu</b>	Partly Cloudy	00-16	18-43	38-73
Solapur	17-21	29-34	Solapur, Nanaj, Kati Vairag, Osmanabad, Tuljapur Latur, Ausa, Kasegaon, Pandharpur, Atpadi Pangri, Barshi – <b>No Rain</b>	Partly Cloudy	03-21	15-42	45-63
Sangli	16-21	29-33	Sangli, Miraj, Shirguppi, Kagvad, Palsi, , Vite Arag Shetfal Kavatha Mahankal, Palus, Valva, Tasgaon Khanapur- <b>No Rain</b>	Partly Cloudy	00-21	13-33	35-70
Bijapur	17-21	28-33	Bijapur Tikota, Telsang Chadchan - No Rain	Partly Cloudy	03-24	14-32	39-62
Hyderabad	14-17	31-32	Hyderabad, Medchal, Zahirabad - No Rain	Partly Cloudy	02-18	23-39	57- 83

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:** 109 days

b) Expected growth stage of the crop: - Veraison stage

# III. Nutrition and irrigation management (Dr. A.K. Upadhyay)

Expected pan evaporation: 4.5 to 6 mm

#### Amount of irrigation advised

- 1. From Berry development stage onwards till maturity, apply irrigation through drip @ 7,600- 10,200 L/ acre/ day.
- 2. Remember that if the soil is at field capacity (wapsa) then do not 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. In case berry cracking is observed withhold irrigation water application for few days. Remove the cracked berries and check whether the soil is at field capacity (wapsa) or not. If below field capacity (wapsa) start irrigation water application.

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

#### **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.

#### **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)

Now, most of the vineyards are at maturity stage and sugar may not be a problem this year since there was no cold spell for longer period. Hence, excess application of sugar enhancer type of chemicals should be avoided. For local grapes, golden (amber) color is in demand and to achieve this basal leaf defoliation may be done fso that natural color development will occur.

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

#### 1. Old vineyard:

During the coming week, the minimum temperature will be increasing at faster rate. This will lead to increase in demand of irrigation water at the time of berry development. Sudden change in temperature will create the balance between available resource and the actual requirement of the vine. Hence, the symptoms of mummification and rachis drying will be more prominent in the vineyard with more bunch load.

The irrigation based on the PAN reading will help to control the problem. The application of calcium and magnesium through soil upto the period of 25-30 days before veraision will help have to avoid rachis drying.

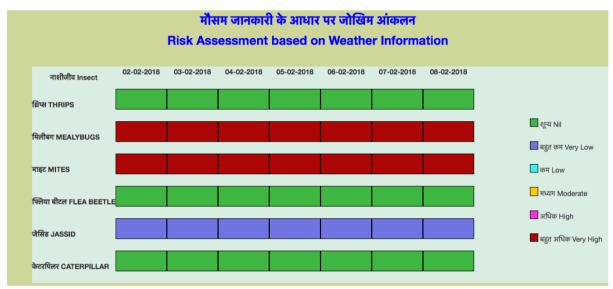
#### VI. Disease management (Dr. S.D. Sawant and Dr. Sujoy Saha)

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

Prior to bagging, powdery mildew infected berries can be removed manually followed by an application of sulphur@ 2-3g/L. Care should be taken that there are no spots on the berry due to sulphur application. Application of BCA i.e. soil drench and foliar spray of *Trichoderma* sp and/or *Bacillus* sp and foliar spray of *Ampelomyces quisqualis* may be continued. However if bagging is done in a "cap" like manner sulphur and BCA may be applied later.

Exporters are requested to adhere to the chemicals as given in Annexure 5 of NRL, ICAR-NRCG

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



- Vineyards may have higher mealybug and thrips infestation. Monitoring for thrips should be done by tapping the shoots on white paper and counting number. The monitoring of thrips should be done during afternoon hours and the monitoring for jassids should be done during 6-7 pm in the evening.
- Emamectin benzoate 5 SG @ 0.22 g/L water (PHI 30 days) is effective to manage thrips, jassid and caterpillars.
- Buprofezin 25 SC @ 1.25 ml/L water (PHI 45 days) is effective for management of mealybugs.
- Mite population may start building up in the vineyards, therefore, careful monitoring is essential. Sulphur 80WDG @ 2.0 g/L water is effective against mites.

Crop advisory relevant to different places is prepared by experts, considering forecasted weather, crop growth stages in majority of vineyards and ground information on incidence of different conditions in different grape growing areas received from regular interaction with progressive grape growers. No claims are made on its correctness.

Usefulness of this information may be communicated to us at director.nrcg@icar.gov.in.