मौसम पूर्वानुमान आधारित साप्ताहिक सलाह Weather Forecast Based Weekly Advisory

(Assumption: Fruit Pruning date - 15/10/2016)

I. Weather Data for the Prevailing Week

Thursday (02/02/2017) - Thursday (09/03/2017)

Location	Temperature		Possibility of Rain	Cloud	Wind Speed	R H%	
	Min	Max		Cover	(Km/hr)	Min	Max
Nasik	17-19	28-34	No Rain Nasik, Ojhar, Pimpalgaon Baswant, Vani, Palkhed, Dindori, Shirdi, Loni, Rahata, Niphad, Kalwan, Devla, Lasalgaon, Satana.	Clear	02-23	13-34	43-91
Pune	18-22	31-36	No Rain Pune, Phursungi, Loni Kalbhor, Uruli Kanchan, Yavat, Rahu, Patas, Pargaon, Supa, Baramati, Narayangaon, Junnar.	Clear	02-26	11-27	32-67
Solapur *	22-24	36-37	No Rain Solapur, Nanaj, Kati, Atpadi, Vairag, Pandharpur, Kasegaon, Barshi, Pangri, Kari, Latur, Ausa, Osmanabad, Tuljapur.	Clear	03-26	09-14	24-37
Sangli *	19-22	34-37	No Rain Sangli, Miraj, Shirol, Arag, Shirguppi, Kagvad, Kavate Mahankal, Palus, Valva, Palsi, Shetfal, Vite, Khanapur	Clear - partly cloudy	02-26	11-15	38-56
Bijapur *	22-23	35-37	No Rain Bijapur, Tikota, Telsang, Chadchan	Clear	03-23	09-13	29-46
Hyderabad *	21-22	35-37	No Rain Hyderabad, Medchal, Rainlaguda. Zahirabad	Clear	03-21	12-24	35-91

^{*} Tropical storm conditions possible

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: 126 days

b) Expected growth stage of the crop: - Berry maturing and harvesting stage

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

Expected pan evaporation: 5.5 to 7.5 mm

Amount of irrigation advised

For October pruned vineyards, during ripening to harvest stage, apply irrigation through drip @ 9,350 to 11,000 L/acre/day for Nasik and Pune locations and from 10,200 to 12,750 L/ acre/day for Sangli, Solapur, Hyderabad and Bijapur locations.

In late pruned vineyards (Nov., 2016), during berry development stage, apply irrigation through drip 9,350 to 11,000 L/acre/day for Nasik and Pune locations and from 10,200 to 12,750 L/acre/day for Sangli, Solapur, Hyderabad and Bijapur locations.

The plots which have entered into rest period provide only need based irrigation to protect the existing leaves from drying and also contribute towards increasing the reserves of the vines through photosynthetic activity. The quantum of irrigation water applied should be approx. 3000 to 3500L/ acre, twice in a week. Care should be taken to reduce/stop the water in case new growth is observed on the shoot.

IV. Soil and Nutrient requirement (Dr. A.K. Upadhyay)

October pruned vineyard

- 1. Ripening to Harvest stage: Apply Sulphate of potash or 0-0-50 @ 25 kg/ acre in 3-4 splits for this week. 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. In case of high yielding vineyards, continue application of Magnesium sulphate @ 25 kg/acre in 3-4 splits.
- 2. Rest period: Apply 10kg Urea, 10 kg DAP and 10 kg Sulphate of Potash/ acre in two splits every 15-20 days.

November pruned vineyard

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. . If the soil has high calcium carbonate content, apply 5 kg Zinc sulphate along with 5 kg Ferrous sulphate in two splits.

Foundation pruning (2017-18):

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.

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

To increase the sugar content of berries it is advised to keep the leaves in healthy conditions. Applications of sea weed extracts and use of micronutrients especially of Magnesium sulphate 2-3 times at an interval of 5 days will be beneficial.

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

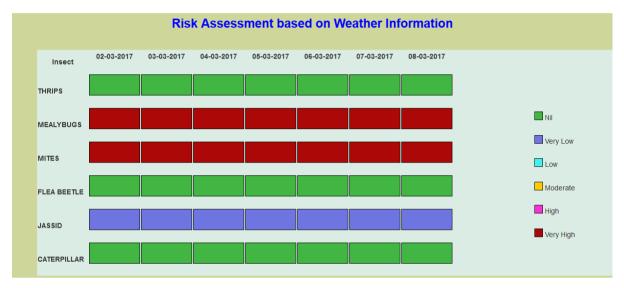
Grafted vines: During the coming week, the temperature is expected to rise above 35°C with RH less than 40%. Hence, the water requirement will be higher. To achieve high vigor with longer internode for the development of trunk, the irrigation and nitrogen requirement will be higher. Considering this, irrigation and nutritional management should be priority. Among the nutrients, nitrogen (Urea or 12:61:0 @ 0.5 kg/acre per day basis and 18:46:0 @ 25kg/acre through basal dose) can be applied.

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

Days after	Risk of diseases						
pruning	Downy mildew	Powdery mildew	Anthracnose	Others (specify)			
123 – 129	Nil	Nil	Nil	Nil			

Spraying should be done with *Trichoderma* sp/*Bacillus subtilis*@ 3-4g/L so as to ensure higher shelf life and manage post - harvest diseases.

VIII. Insect and Mite management. (Dr. D.S. Yadav and Dr. B.B Fand)



- Take care of mealybugs and mites in vineyards near to harvesting.
- Look carefully for bunch infestation of mealybugs and to prevent its further spread to healthy bunches, **spot application** of insecticides like neem based products, buprofezin (@ 1.25 ml/L)) may be given to control localised infestations. Such selective bunches should be discarded and necessarily not be used for consumption.
- Consider the MRL and PHI of insecticides before use (Annexure 5 of NRL, ICAR-NRCG, Pune)
- Jet spray of water @ 1000 L per acre may be helpful in minimising mite infestation. Sulphur dusting or spraying is also useful for managing mite in vineyards.

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.