# मौसम पूर्वानुमान आधारित साप्ताहिक सलाह

## **Weather Forecast Based Weekly Advisory**

(Assumption: Fruit Pruning date - 15/04/2018)

## I. Weather Data for the Prevailing Week

Thursday (21/06/2018) -- Thursday (28/06/2018)

Location	Temperature (°C)		Possibility of Rain	Cloud	Wind Speed	R H%	
	Min	Max		Cover	(Km/hr)	Min	Max
Nasik	23-24	27-32	Moderate Rain- Sun-Wed Nashik, PimpalgaonBaswant,Ojhar, Dindori, Vani,  Light Rain-Mon Kalwan,Devla,Satana,Niphad,Palkhed, Good Rain – Mon Moderate Rain- Tue Loni,Shirdi	Cloudy	13-25	57-68	88-91
Pune	23-24	27-30	Good Rain – Sun, Tue, Thu Moderate Rain- Mon, Wed Pune, Phursungi, Narayangaon, Junnar  Light Rain-Thu-Thu LoniKalbhor, Uruli Kanchan, Yavat, Patas, Supa, Baramati,	Cloudy	12-24	65-72	88-91
Solapur	23-24	30-32	Good Rain - Fri Light RainSun-Thu Solapur,Nanaj, Kati,Pandharpur, Kasegaon  Good Rain - Fri-Sat Moderate Rain Tue, Barshi,Vairag,Pangri,  Light RainThu-Thu Osmanabad, Tuljapur,  Moderate RainFri-Tue Latur, Ausa,  Moderate RainThu, Sun, Tue Atpadi,	Cloudy	08-21	64-66	87-91
Sangli	22-23	27-30	Good RainMon-Tue Moderate Rain- Thu-Sun and Wed-Thu Sangli,Miraj, Shirguppi, Kagvad, Arag, Palsi,Vite, KavatheMahankal, Tasgaon,  Moderate Rain Thu, Sun Light RainMon, Wed- Thu Good Rain - Tue Palus, Valva Good Rain - Fri Shetfal, Light Rain - Khanapur	Mostly cloudy	12-26	69-72	88-92

Location	Temperature (°C)		Possibility of Rain	Cloud	Wind Speed	R H%	
	Min	Max		Cover	(Km/hr)	Min	Max
Bijapur	22-23	29-31	Moderate Rain Fri,	Partly	13-28	62-68	86-92
			Light Rain- Sun and Tue	cloudy			
			Bijapur, Tikota, Telsang,				
			Moderate Rain Fri,				
			Light Rain- Sun and Tue-Thu				
			-Chadchan				
Hyderabad	22-24	31-35	Moderate RainSat-Mon	Partly	02-22	55-66	89-93
			Light Rain- Tue-Thu	cloudy			
			Hyderabad, Medchal, Zahirabad				

<sup>\*</sup>Thunderstorms in all the location

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: 66 days

**b) Expected growth stage of the crop:** - Initiation of cane maturity stage after foundation pruning

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

#### **Cultural practices to be followed:**

Based on the weather report, the relative humidity in the atmosphere will be more resulting into increased vigor of vine. Under this condition, the vine will put forth high vigor. At present, we have vineyard under framework development, old vineyard in cane maturity stage and also rootstock for grafting. Considering the growth stages, following practices need to be followed.

#### Old vineyard:

In this vineyards, the cane maturity needs to be advanced by following the below given practices.

- a. Pinching of shoot tip.
- b. Removal of side shoots.
- c. Reduce/withdraw nitrogenous fertilizers.
- d. Apply potassic fertilizers.

#### Framework development:

In this vineyard, the framework is under the stage of development. At this stage, mainly cordon development has been completed while the process of development of fruitful canes is ongoing. Taking the advantage of present weather, the second instalment of cordon can be developed. Application of nitrogenous and phosphorus containing fertilizer will help for shoot vigor and fruit bud differentiation in the developing cane.

#### **Rootstock management:**

In this garden, after the re-cut, the new shoots are growing at faster rate. From the available shoots, only three healthy, straight growing and disease free shoots are to be trained to bamboo. Removal of side shoots in instalment (2-3 shoots at an interval of 15 days) will help to obtain the shoot diameter of about 7-8mm at 18 inch above the ground.

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

Days after	Risk of diseases					
pruning	Downy mildew	Powdery mildew	Anthracnose	Others (specify)		
66	moderate	moderate	moderate	Bacterial leaf spot		

There is a possibility of light rain in all the regions but heavy rains are expected on Tue-Wed. On Monday the chances of rains are low and hence all management practices for powdery mildew should be over by Monday. To control powdery mildew sulphur @ 2g/L should be applied. However, in crops which are at the stage of 45-65 days after pruning, in order to reduce vegetative growth to enhance fruit bud differentiation an application of any of the triazoles like hexaconazole or difenoconazole or tetraconazole or flusilazole may be given There can be an increase in incidence of anthracnose in new shoots for which application of thiophenate methyl or carbendazim @ 1g/L is recommended. As the humidity is on the increase, and there is a dip in temperature along with it, incidence of downy mildew is a possibility. To control the disease, sprays of potassium salt of phosphoric acid @2g/L+Mancozeb @2g/L may be given where the shoot growth is ongoing. In regions where early pruning was taken and shoot growth has stopped application of copper based fungicides like copper hydroxide @ 2.5-3g/L may be given. The application of mancozeb will also control bacterial leaf spot incidence, if any.

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



- Spraying of emamectin benzoate 5 SG @ 0.22 gram per litre water or fipronil 80 WG @ 0.06 gram per litre water is effective to manage caterpillars.
- Spraying of sulphur 80 WDG @ 2.0 gram per litre water is effective to manage mites.
- Remove excess shoot to manage thrips populations.
- Vineyards may have higher mealybug infestation as well. However, increase
  in relative humidity will favour build-up of natural enemies and natural
  biological control of mealybugs. Therefore, avoid spraying broad spectrum
  insecticides. Use of insecticides for mealybug control should be avoided.

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 water may be used for management of mealybugs as this insecticide does not harm beneficial organisms in the vineyard.

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.