

# मौसम पूर्वानुमान आधारित साप्ताहिक सलाह

## Weather Forecast Based Weekly Advisory

### I. Weather Data for the Prevailing Week

Thursday (25/05/2017) - Thursday (01/06/2017)

Location	Temperature(°C)		Possibility of Rain	Cloud Cover	Wind Speed (Km/hr)	R H%	
	Min	Max				Min	Max
<b>Nasik</b>	25	34-39	<b>Drizzling</b> Nashik, Ojhar , Pimpalgaon, Vani, Palkhed, Dindori- <b>Mon to Wed</b> Shirdi, Loni - <b>Sat</b> Niphad, Devla, Kelvan , Satana and Rahata - <b>No Rain</b>	Clear- Partly Cloudy	08-21	21-47	73-86
<b>Pune</b>	23-24	32-37	<b>Drizzling</b> Phursungi, Narayangaon, Junnar - <b>Tue to Thu</b> Loni Kalbhor, Uruli Kanchan, Yavat, Supa, Baramati, Patas - <b>Sat</b> Pune- <b>Wed &amp; Thu</b>	Clear- Partly Cloudy	06-21	27-58	71-94
<b>Solapur</b>	26-29	36-42	<b>Drizzling</b> Vairag, Pangri, Barshi - <b>Sat</b> Nanaj, Solapur - <b>Mon to Thu</b> Osmanabad, Latur - <b>Mon to Wed</b> Ausa- <b>Wed &amp; Thu</b> Pandharpur- <b>Mon to Thu</b> Tuljapur- <b>Wed</b> Kati, Kasegaon, Atpadi- <b>No Rains</b>	Clear	05-21	19-49	38-80
<b>Sangli</b>	25-26	34-42	<b>Drizzling</b> Miraj, Shirguppi, Kagvad- <b>Thu, Fri, Mon, Tue</b> Arag- <b>Thu to Thu</b> Shetfal- <b>Sun to Tue</b> Khanapur- <b>Sat to Thu</b> Vite- <b>Fri to Thu</b> Sangli, Palsi, Kavatha, Palus , Valva, Tasgaon, Shirol- <b>No Rain</b>	Clear- Partly cloudy	08-27	18-52	74-87
<b>Bijapur</b>	26-28	36-43	<b>Drizzling</b> Bijapur, Telsang - <b>Sat to Mon</b> Tikota- <b>Sat to Mon and Thu</b> Chadchan - <b>Mon, Wed &amp; Thu</b>	Clear - Partly cloudy	06-26	17-48	44-84
<b>Hyderabad</b>	26-28	36-41	<b>Drizzling-</b> Hyderabad Medchal - <b>Fri to Thu</b> Zahirabad- <b>Sun to Thu</b>	Partly cloudy	3-14	30-58	62-89

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:

b) Expected growth stage of the crop: Forward pruning.

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

Expected pan evaporation: 8.5 to 11 mm

#### **Amount of irrigation advised:**

1. After Foundation pruning, apply 14,450 to 15,300 L/acre per day during shoot growth stage for vineyards in Nasik and Pune and 16,150 to 18,700 L/acre per day for Solapur, Bijapur, Sangli and Hyderabad regions during shoot growth stage. During Fruit bud differentiation stage, apply 6000 to 7000 L/ acre / day.
2. Forecasted for drizzling, hence irrigation water application should be based upon the growth of the vines and could be still lower.

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

#### **Foundation pruning season:**

##### **Shoot growth stage**

1. At shoot growth stage, apply 20 kg urea/ acre in 2 -3 splits after sprouting. In case the soil is calcareous, use ammonium sulphate @ 30 kg/ acre in 2 -3 splits. Do not exceed 65 kg urea or 100 kg Ammonium sulphate on per acre basis during shoot growth stage.
2. In case of vigorous growth of shoots, stop nitrogen application and wait for the growth to stabilize before resuming nitrogen application.
3. Apply 10-15 kg Magnesium Sulphate/ acre around 25- 30 days after pruning
4. In case irrigation water report states sodium content above 100ppm, apply 40 kg SOP/ acre through soil application or 0-0-50 in splits to counter the effect of sodium being supplied through irrigation water.

##### **Fruit bud differentiation stage**

1. During fruit bud differentiation stage, based upon soil test values, apply 45 – 50 kg phosphoric acid or 250 kg SSP in case the soils are deficient in phosphorus. Phosphoric acid application is desirable in calcareous soils.
2. At 45 DAP, perform petiole test to know the nutrient content of the vines. The petioles should be collected from 5<sup>th</sup> leaf from the base of the shoot counting the leaves even if they have been removed.
3. Keep a close watch on the development of leaf blackening symptoms from the margin. This could be due to sodium toxicity and potassium deficiency. In case the problems are observed, moistened the bund and mix gypsum in the moistened soil @ 100 kg /acre. In case of calcareous soils apply sulphur @ 75kg/acre. This should be followed by application of SOP @ 25-30 kg/acre or 0-0-50 in splits through drip.
4. Apply 10-15 kg Magnesium Sulphate/ acre between 50-60 days after pruning.
5. In calcareous soils, provide foliar application of Magnesium sulphate (@ 3g/L) followed by SOP (@ 4g/L)

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

Nil.

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

### Vineyard under framework development:

The first instalment of cordon development is at the final stage of completion. The weather prediction during the coming week will be drizzling in many of the places. Hence, the vegetative growth will be at much faster rate. To control the vigor, spray of 0:52:34 @ 2.0 to 2.50 g/litre water can be taken up. This will help to control the vigor and initiate the fruit bud differentiation. Utilization of further vigor for the development of second instalment of the cordon should be given due importance.

### Old vineyard:

At this stage, the sub-cane development is in progress. However, with the rain shower, the humidity in the atmosphere will be increased. This will develop the dense canopy by increased shoot vigor. The incidence of powdery mildew will be more under such canopy since the leaf will be toward maturity. Hence, 2-3 leaf removal at the base of shoot will help to reduce the incidence. This will also support for uniform spray coverage. There will be emergence of excess side shoot. Hence, the priority should be given to remove these shoots to avoid dense canopy.

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

Days after pruning	Risk of diseases			
	Downy mildew	Powdery mildew	Anthracnose	Others (specify)
39	Nil	High	Nil	Nil

- During the current week there will be light rains, so it is required to take care of powdery mildew as there will be cloudy weather and slight built up of relative humidity. It is advised to spray sulphur 80 WG @ 1.5 g/L before rains which will reduce the possibility of powdery mildew infestation in vineyards where the sulphur has not yet sprayed.
- There is no risk for downy mildew and anthracnose during this week.
- In the next week, due to possibility of good rains in almost all the grape areas, temperature may drop down which will increase the risk for downy mildew incidence. Therefore, next week's strategy should focus on management of downy mildew.

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



- Application of Imidacloprid 17.8 SL @ 0.3 ml/lit will help in control of mealybugs, thrips flea beetle, and jassids. This will also prevent shoot malformation due to sap sucking by mealybugs
- For controlling mealybugs on stems, cordon and shoots, give whole plant wash with Buprofezin @ 1.25 ml/lit using 2.0 lit of spray solution per vine. Spot application of infested vines is advised instead of blanket spraying.
- Due to possibility of drizzling rains and build up of relative humidity application of entomopathogenic fungi viz. *Metarrizium*, *Beauveria* and *Lecanicillium* may be useful for controlling sucking pests and caterpillars.
- **Monitoring for stem borers:** The adults of stem borer *Stromatium barbatum* start emerging during the last week of May to first fortnight of June. Installation of light traps will be helpful in monitoring the initiation of emergence of stem borer adults. Run the light traps for 3 hours daily, during evening between 7.00 pm – 10.00 pm and destroy the collected beetles in water mixed with insecticide

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](mailto:director.nrcg@icar.gov.in).