

# मौसम पूर्वानुमान आधारित साप्ताहिक सलाह

## Weather Forecast Based Weekly Advisory

### I. Weather Data for the Prevailing Week

Thursday (27/04/2017) - Thursday (04/05/2017)

Location	Temperature		Possibility of Rain	Cloud Cover	Wind Speed (Km/hr)	R H%	
	Min	Max				Min	Max
<b>Nasik</b>	22-26	37-38	<b>Drizzling</b> Nashik, Ojhar, Palkhed, Dindori, Vani - <b>(Mon &amp; Tue)</b> Shirdi, Devla – <b>(Sun, Mon, Tue)</b> Loni, Niphad – <b>(Sun to Tue)</b> Kelvan – <b>(Sun &amp; Mon)</b> <b>No Rain</b> Pimpalgaon, Baswant, Dindori, Rahata, Lasalgaon, Satana	Clear	05-19	15-22	61-80
<b>Pune</b>	21-25	35-38	<b>Drizzling</b> Loni Kalbhor, Uruli Kanchan, Yavat, Supa, Patas – <b>(Sun, Mon, Tue)</b> Baramati - <b>(Sun &amp; Mon)</b> <b>No Rain</b> Pune, Phursungi, Rahu, , Pargaon,, Narayangaon, Junnar.	Clear – Partly Cloudy	05-18	17-27	61-84
<b>Solapur</b>	27-30	39	<b>Drizzling</b> Solapur, Nanaj, Pandharpur, Kati - <b>(Sun , Mon, Tue, Wed)</b> Vairag, Tuljapur,- <b>(Sun &amp; Mon)</b> Osmanabad, Latur, Ausa, Pangri, Kasegaon, Atpadi, Barshi - <b>(Sun , Mon, Tue)</b> <b>Light Rain - Kati – (Tue)</b>	Clear	05-21	14-19	27-39
<b>Sangli</b>	26-28	39-41	<b>Drizzling</b> Sangli – <b>(Sun to thu)</b> Palus – <b>( Sun, Tue, Wed)</b> Valva, Tasgaon – <b>(Sun &amp; Tue)</b> Miraj, Kagvad, Shirguppi, Arag, Shetfal – <b>(Mon to Thu)</b> Khanapur – <b>(Sun to Tue)</b> Palsi – <b>(Tue &amp;Wed)</b> Vite – <b>(Sun, Tue &amp;Wed)</b> <b>No Rain</b> Shirol, Kavate, Mahankal	Clear	03-24	13-20	44-73
<b>Bijapur</b>	28-31	39-41	<b>Drizzling</b> Bijapur – <b>(Sun, Mon &amp; Wed, Thu)</b> Chadchan - <b>(Sun , Mon, Tue, Wed)</b> <b>Light Rain</b> Bijapur, Tikota, Telsang – <b>(Tue)</b>	Clear	08-21	12-20	30-53
<b>Hyderabad</b>	26-27	38-40	<b>Drizzling-</b> Medchal – <b>(Sat to Tue)</b> Hyderabad- <b>(Mon &amp;Tue)</b> Zahirabad – <b>(Fri to Thur)</b> <b>No Rain</b> Rainlaguda.,	Clear – partly cloudy	02-14	20-25	47-68

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: Rest period.**

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

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

Expected pan evaporation: 7.5 to 10 mm

### **Amount of irrigation advised**

1. Rest period: There is need to provide need based irrigation to protect the existing leaves from drying, so that it will contribute towards increasing the reserves of the vines through photosynthetic activity. The quantum of irrigation water applied should be approx. 5000 L/ acre, twice in a week. Care should be taken to reduce/stop the water in case new growth is observed on the shoot.
2. After Foundation pruning, apply 12,750 to 15,300 L/acre per day during shoot growth stage for vineyards in Nasik and Pune, 15,300 to 17,000 L/acre per day for Sangli, Solapur, Bijapur and Hyderabad regions during shoot growth stage. During Fruit bud differentiation stage, apply 6000 L/ acre / day.
3. Forecasted for drizzling, hence irrigation water application should be based upon the growth of the vines and could be still lower.
4. In case there is probability of less irrigation water availability, then flood the bund (not whole vineyard) at pruning and mulch the bunds. Mulching will reduce the evaporation of water from soil surface. Flooding the bund will wet the deeper layers and thus, also reduce the evaporation losses. Thus, this will reduce the salt load in the soil and at the same time saturate the soil leading to proper sprouting.
5. Cover the cordons of the pruned vines with shadenet, if available, for uniform sprouting as well as reducing the irrigation water needs by 20-25 %. Shadenet coverage will reduce the temperature impact on the cordons. However, remove shadenet after 3-5 leaf stage.

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

### **Rest period to foundation pruning:**

1. Apply 10kg Urea, 10 kg DAP and 10 kg Sulphate of Potash/ acre in two splits every 15-20 days.
2. The vineyards where sodicity problems are there, apply gypsum to the soil for removal of sodium from the soil exchange complex. In case of calcareous soils, use sulphur for similar purpose.
3. Before starting pruning, go for soil and irrigation water testing to plan for soil, nutrient and water management.

### **Foundation pruning season:**

#### **Pre- pruning**

1. Apply FYM/ compost/other organic sources including green manuring atleast 12-15 days before Foundation pruning. If possible, mix 200 kg Single super phosphate in the FYM and apply in the soil. Application of organics improves the nutrient and water retention in the root zone and reduces nutrient losses from the profile.
2. If soils are calcareous in nature, then apply 50 kg sulphur between the vines in the soil. The sulphur should be properly mixed in the soil for improving its efficacy in taking care of calcium carbonates. Mixing of sulphur in organics lead to better utilization of

sulphur for reducing calcium carbonate in the root zone along with reduction in soil pH also.

### 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. In case of vigorous growth of shoots, stop nitrogen application and wait for the growth to stabilize before resuming nitrogen application.
2. Keep a close watch on the development of leaf blackening symptoms from the margin.

### 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.

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

No recommendations as on date

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

### New vineyard

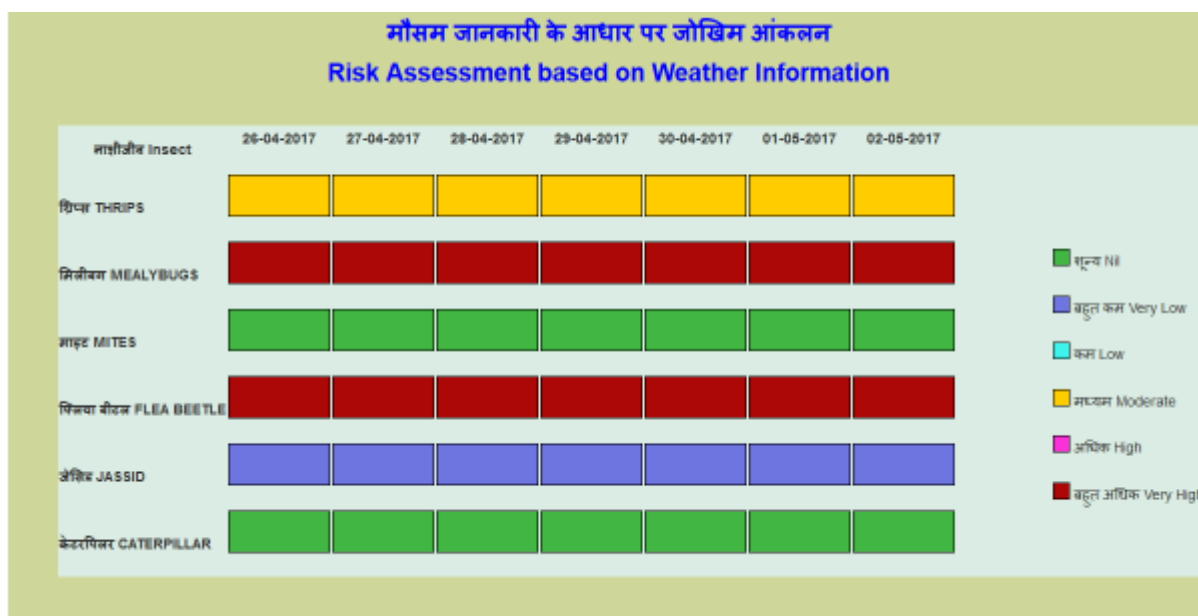
Before developing the cordon, the trunk developing should be given prime importance. The vigour of trunk to be maintained by applying nitrogenous fertilizers. While developing the cordon, the vegetative growth to be pinched 2-3 inch below the first wire in case of Y trellies whereas in case of bower trained vine, the pinching should be done at 3 inch below the top wire. The cordon should be developed by “stop n go” method. This will help to develop strong cordon as well as required canes on each cordon. During this stage application of potassic fertilizer needs to be avoided. This will help to achieve the longer internode on cordon. At this stage, urea, 12:61:0 or 18”46:0 can only be applied.

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

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

Cloudy conditions will prevail in this week and there is a possibility of rains only after 3<sup>rd</sup> May. Till then there is no need to take any precautions for any disease.

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



- The newly pruned vineyards should carefully be observed for mealybug infestation.
- Spot application of buprofezin 25 SC @ 1.25 ml/L may be given to control localized infestations of mealybugs.
- At sprouting stage, preventive application of Imidacloprid 17.8 SL @ 0.3 ml/lit will help in control of thrips flea beetle, , and mealybugs. This will prevent shoot malformation due to sap sucking by these insects

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).