

# 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 (05/04/2018) - Thursday (12/04/2018)

Location	Temperature (°C)		Possibility of Rain	Cloud Cover	Wind Speed (Km/hr)	R H%	
	Min	Max				Min	Max
<b>Nasik</b>	22-24	36-38	Nashik Dindori, Vani Baswant, Niphad Shirdi, Loni Pimpalgaon, Devla, Satana, Ojhar, Palkhed Kalwan <b>Drizzling - Fri</b>	Mostly Clear	02-17	15-21	38-68
<b>Pune</b>	23-24	36-39	Pune, Loni Kalbhor, Uruli Kanchan Patas, Supa, Baramati, Yavat <b>Drizzling - Sat, Sun</b> Phursungi <b>No Rain</b> Narayangaon, Junnar <b>Drizzling - Fri Sat</b>	Partly Cloudy	02-18	14-21	39-60
<b>Solapur</b>	25-28	36-40	Solapur, Nanaj, Pandharpur <b>Drizzling - Sat, Sun, Mon, Tue</b> Vairag, Kati Pangri Barshi <b>Drizzling Sun Mon</b> Osmanabad Tuljapur Latur Ausa <b>Light Rain- Mon Tue</b> Atpadi <b>Good Rain- Sat</b> Kasegaon, <b>Drizzling- Sun, Mon, Tue</b> <b>Light Rain-Sat</b>	Partly Cloudy	03-14	19-32	40-57
<b>Sangli</b>	23-24	36-40	Sangli, Miraj, Shirguppi, Kagvad, Arag <b>No Rain</b> Kavatha Mahankal Palus, Valva, Tasgaon Shetfal, Khanapur, Palsi, Vite <b>Drizzling- Sat, Sun, Mon, Tue</b>	Partly Cloudy	04-19	15-27	50-73
<b>Bijapur</b>	24-26	35-39	Bijapur Tikota, Telsang Chadchan <b>Drizzling-Fri Sat, Sun, Mon, Tue, Wed, Thu</b>	Partly Cloudy	04-19	15-36	52-64
<b>Hyderabad</b>	20-22	33-37	Hyderabad, Medchal <b>No Rain</b> Zahirabad <b>Drizzling Fri Sat, Sun, Mon, Tue,</b>	Partly Cloudy	04-12	37-61	82-100

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: -

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

Expected pan evaporation: 8 to 10 mm

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

1. 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. 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. Shoot growth stage:
  - a) Irrigation water < 1dS/m : apply irrigation through surface drip @ 10,880 to 12,240 L/acre per day during shoot growth stage for Nasik, Pune and Hyderabad region and from 15,300 - 17,000 L/acre per day for Sangli, Solapur and Bijapur region.
  - b) Saline irrigation water (1.1 – 2.0 dS/m): apply irrigation through surface drip @ 13,600 to 15,300 L/acre per day during shoot growth stage for Nasik, Pune and Hyderabad region and from 15,300 - 17,000 L/acre per day for Sangli, Solapur and Bijapur region.
3. In case there is probability of less irrigation water availability, then flood the bund (not whole vineyard) at pruning and mulch the bunds. Flooding the bund will reduce the accumulated salt load in the root zone and mulching will reduce the evaporation of water from soil surface. Thus, this will reduce the salt load in the soil and at the same time saturate the soil leading to proper sprouting. Further, in case less irrigation water is available still the newly emerging shoots will not be damaged due to salinity.

#### **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.

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

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.
3. At shoot growth stage, apply 25 kg urea/ acre in 2 -3 splits after sprouting. In case of vigorous growth of shoots, stop nitrogen application and wait for the growth to stabilize before resuming nitrogen application. In calcareous soils, donot apply urea, instead use Ammonium sulphate @ 40 kg/acre in atleast 3 splits from sprouting onwards till next 10 days.

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

Nil

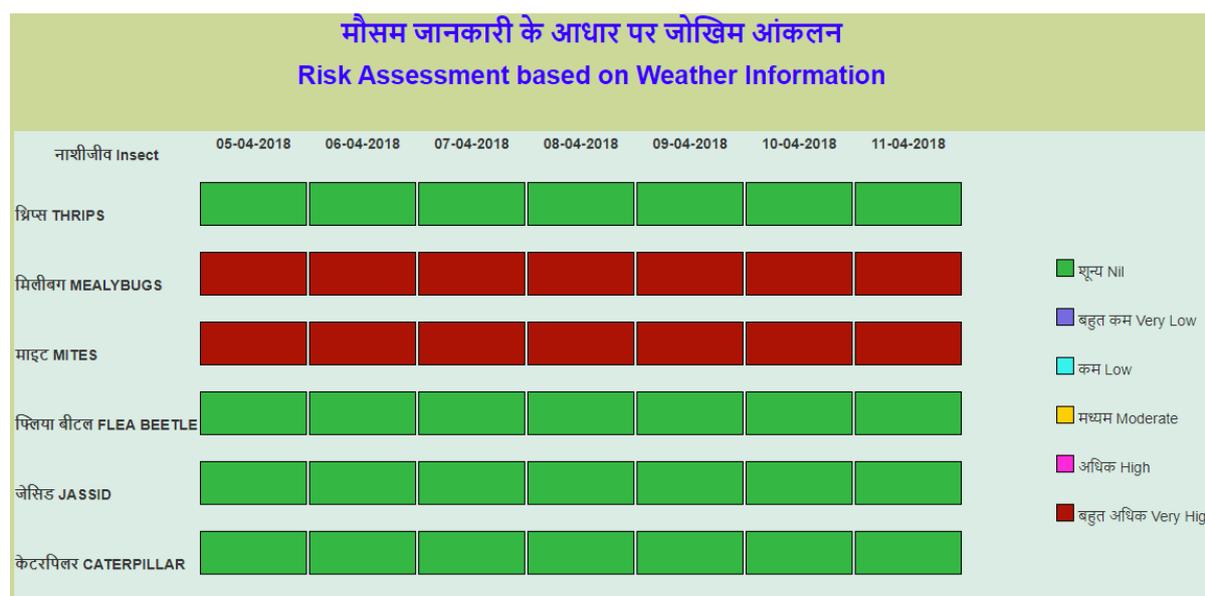
#### V. Canopy management (Dr. R.G. Somkuwar)

Nil

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

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

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



- Vineyards may have higher mealybug infestation. Buprofezin 25 SC @ 1.25 ml/L water (PHI 45 days) is effective for management of mealybugs.
- Sulphur 80WDG @ 2.0 g/L water (PHI 15 days) is effective against mites. Weekly water sprays of 1000 litres water per acre may help in removing dust from leaves and breaking mite webbings which in turn may reduce mite population build up.
- Newly grafted vineyards may experience heavy thrips and moderate jassid infestation on new growth after re-cut or shoot tipping. Fipronil 80 WDG @ 0.06 g/L water or emamectin benzoate 5 SG @ 0.22 g/l water are effective against both thrips and jassids.

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).