

# 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 23/02/2017) - Thursday (02/03/2017)

Location	Temperature		Possibility of Rain	Cloud Cover	Wind Speed (Km/hr)	R H%	
	Min	Max				Min	Max
<b>Nasik</b>	18-21	33-36	<b>No Rain</b> Nasik, Ojhar, Pimpalgaon Baswant, Vani, Palkhed, Dindori, Shirdi, Loni, Rahata, Niphad, Kalwan, Devla, Lasalgaon, Satana.	Clear	03-14	13-18	28-44
<b>Pune</b>	21-22	35-37	<b>No Rain</b> Pune, Phursungi, Loni Kalbhor, Uruli Kanchan, Yavat, Rahu, Patas, Pargaon, Supa, Baramati, Narayangaon, Junnar.	Clear	00-18	11-16	24-53
<b>Solapur *</b>	23-24	37-38	<b>No Rain</b> Solapur, Nanaj, Kati, Atpadi, Vairag, Pandharpur, Kasegaon, Barshi, Pangri, Kari, Latur, Ausa, Osmanabad, Tuljapur.	Clear	03-18	8-14	22-35
<b>Sangli *</b>	21-23	36-37	<b>No Rain</b> Sangli, Miraj, Shirol, Arag, Shirguppi, Kagvad, Kavate Mahankal, Palus, Valva, Palsi, Shetfal, Vite, Khanapur	Clear	03-19	12-14	29-65
<b>Bijapur *</b>	22-24	36-37	<b>No Rain</b> Bijapur, Tikota, Telsang, Chadchan	Clear	05-21	12-14	27-40
<b>Hyderabad *</b>	19-21	36-37	<b>No Rain</b> Hyderabad, Medchal, Rainlaguda. Zahirabad	Clear	02-18	12-17	31-62

\* 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:** 119 days

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

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

Expected pan evaporation: 5 to 7.5 mm

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

For October pruned vineyards, during ripening to harvest stage, apply irrigation through drip @ 8,500 to 10,200 L/acre/day for Nasik, Pune and Hyderabad locations and from 10,200 to 12,750 L/ acre/ day for Sangli, Solapur and Bijapur locations.

In late pruned vineyards (Nov., 2016), during berry development stage, apply irrigation through drip @ 8,500 to 10,200 L/acre/day for Nasik, Pune and Hyderabad locations and from 10,200 to 12,750 L/ acre/ day for Sangli, Solapur 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. 3000L/ 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.

#### **Foundation pruning:**

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)**

In this week the sky is clear so no need to use any PGRs as such have to focus on keeping leaf healthy. Now temperature is increasing sharply hence the maturity in grapes may reach faster so growers has to be aware of this and accordingly they have to plan for harvesting..

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

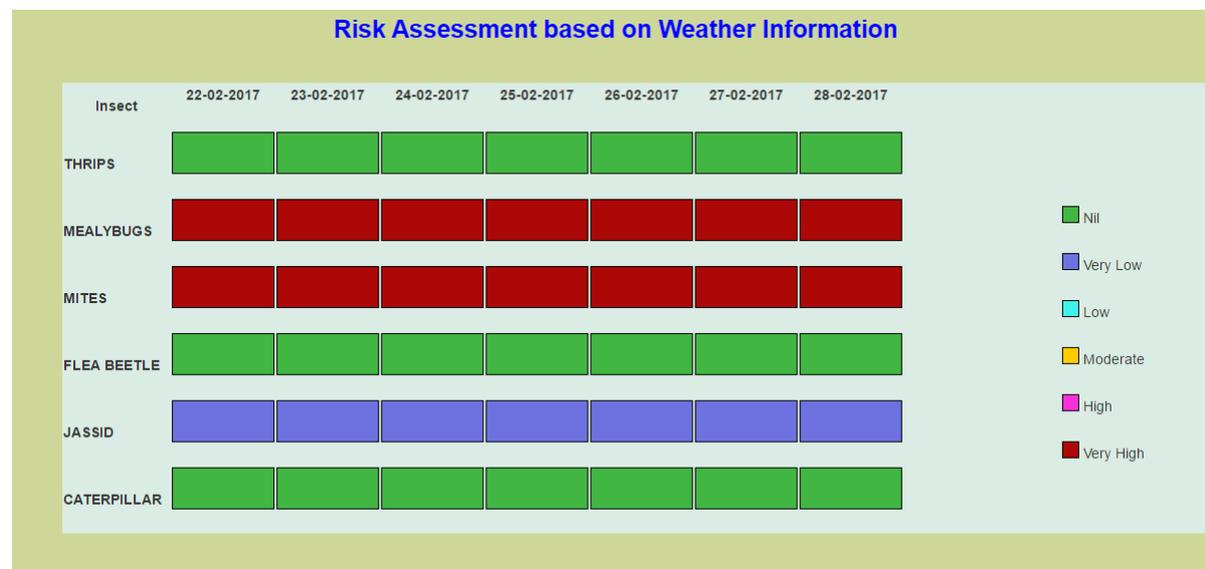
1. **Recut of grafted vines:** With the high temperature water requirements will increase. Hence for high vigor required, nitrogen and irrigation is important. Water spray after 5-6 days of re cut during 11.0 am to 12.0 pm and 3.30 to 4.0 pm will help for early and uniform bud sprout
2. **Early pruning:** Trench opening and application of fym (2 basket) +400-500 g SSP per vine should be supplied in early pruned vineyards. Cutting of roots even upto 30% will help to provide new white roots.

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

Days after pruning	Risk of diseases			
	Downy mildew	Powdery mildew	Anthracnose	Others (specify)
116 – 122	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.

\*Avoid use of imidacloprid at flowering period and after 50 days of fruit pruning.

\*\*Fipronil should be used only once in a fruiting season and should be avoided after flowering period

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).