

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 (15/03/2018) - Thursday (22/03/2018)

Location	Temperature (°C)		Possibility of Rain	Cloud Cover	Wind Speed (Km/hr)	R H%	
	Min	Max				Min	Max
Nasik	19-22	29-35	Nashik, Ojhar, Palkhed, Dindori, Vani Baswant, Niphad Shiridi, Loni Pimpalgaon Kalwan, Devla, Satana Drizzling – Thu,Fri,Tue,Wed	Cloudy	01-16	21-30	52-67
Pune	19-23	29-35	Pune, Phursungi Narayangaon, Junnar- Drizzling – Thu,Fri, Sat Sun Loni Kalbhor, Uruli Kanchan Patas, Supa, Baramati Yavat Light rain- Thu Drizzling – Thu,Fri	Cloudy	02-14	20-99	62-70
Solapur	21-25	33-37	Solapur, Nanaj, Kasegaon, Pandharpur, Atpadi, Kati Osmanabad, Tuljapur Latur, Ausa, Vairag, Pangri, Barshi Light rain- Sat & Tue Drizzling –Sun, Mon, Thu	Partly Cloudy	05-20	22-36	49-86
Sangli	20-23	32-36	Sangli, Miraj, Shirguppi, Kagvad, Palsi, Vite Arag Shetfal Kavatha Mahankal, Palus, Valva, Tasgaon Khanapur Drizzling -Thu, Fri, Mon Moderate rain- Tue	Partly Cloudy	04-14	30-50	70-89
Bijapur	21-24	29-36	Bijapur Tikota, Telsang Chadchan Drizzling -Thu, Sat, Sun, Mon, Thu Light rain- Wed	Partly Cloudy	07-19	22-40	51-93
Hyderabad	17-22	29-35	Hyderabad, Medchal, Zahirabad Drizzling –Fri,Tue, Wed Light rain- Wed	Mostly Cloudy	02-16	42-75	63-100

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. b) Expected growth stage of the crop: - Post Veraison stage

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

Expected pan evaporation: 6 to 8 mm

Amount of irrigation advised

1. During ripening to harvest stage, apply irrigation through drip @ 10,200 to 11,900 L/acre/day for Nasik, Pune and Hyderabad locations and from 12,000 to 13,600 L/ acre/day for Sangli, Solapur, and Bijapur locations.
2. 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. 3000 - 4000L/ acre, once in a week. Care should be taken to reduce/stop the water in case new growth is observed on the shoot.

3. In case there is probability of less irrigation water, then flood the bund (not whole vineyard) at pruning and mulch the bunds. This will remove the salts already accumulated during Fruit pruning season and further, through 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.

IV. Soil and Nutrient management (Dr. A.K. Upadhyay)

Ripening to Harvest stage:

1. Apply Sulphate of potash or 0-0-50 @ 25 kg/ acre in 3-4 splits for next two weeks. 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.

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 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.

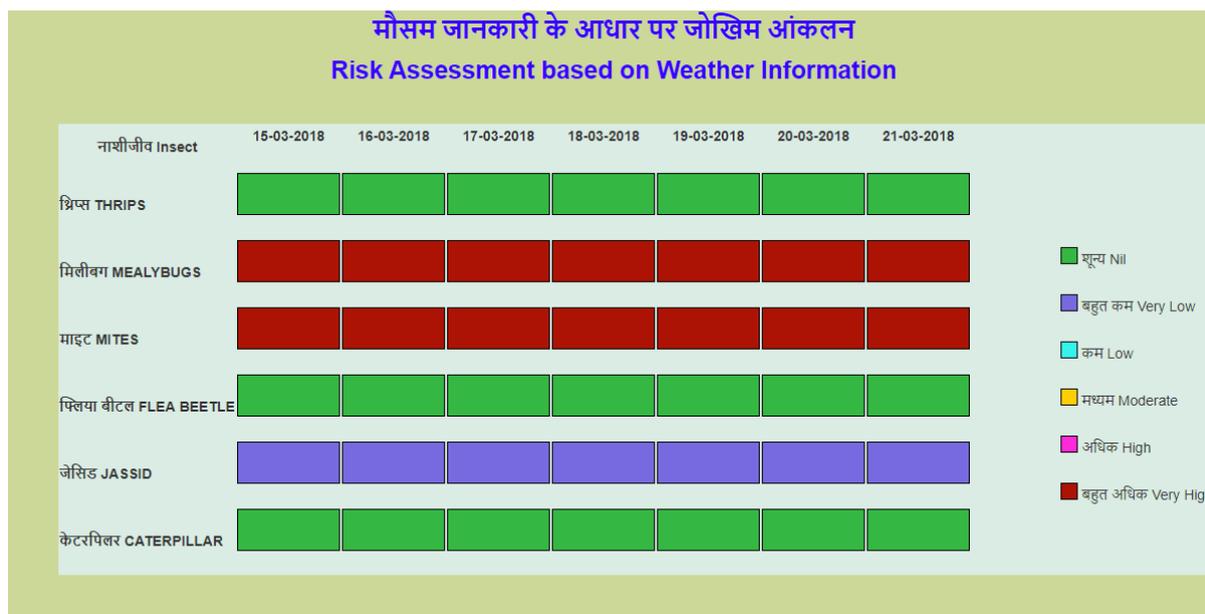
VI. Canopy management (Dr. R.G. Somkuwar)

Management after Re-cut:

The increase in temperature will reduce the relative humidity in the atmosphere. This will lead to increase in transpiration rate thereby increasing the water requirement. Hence, irrigation during morning or evening time may help to use the available water efficiently. Mulching on the bund will also be helpful in controlling the water loss from soil surface.

The shoots are growing at faster rate. Selection of shoot to develop the trunk is important. Possibly, the second shoot should be selected for training to bamboo. The chances of infection in this shoot are less. The trunk development should be in the instalment. This is also called as "stop and go" system of trunk development. The growing shoot should be pinched at 6-7 leaf when it is 9-10 leaf stage. The side will appear after 6-7 days. Those shoots are to be pinched at 3-4 leaf as they will help to support for food material. Application of fertilizer like DAP, Urea, ammonium sulphate and 12:61:0 will help to increase the shoot length.

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.