

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 (30/03/2017) - Thursday (06/04/2017)

Location	Temperature		Possibility of Rain	Cloud Cover	Wind Speed (Km/hr)	R H%	
	Min	Max				Min	Max
Nasik	22-25	35-39	No Rain Nasik, Ojhar, Pimpalgaon Baswant, Vani, Palkhed, Dindori, Shirdi, Loni, Rahata, Niphad, Kalwan, Devla, Lasalgaon, Satana.	Clear	06-21	17-27	46-87
Pune	22-26	36-39	No Rain Pune, Phursungi, Loni Kalbhor, Uruli Kanchan, Yavat, Rahu, Patas, Pargaon, Supa, Baramati, Narayangaon, Junnar.	Clear	05-12	15-24	40-83
Solapur *	27-30	40-41	No Rain Solapur, Nanaj, Kati, Atpadi, Vairag, Pandharpur, Kasegaon, Barshi, Pangri, Kari, Latur, Ausa, Osmanabad, Tuljapur.	Clear	06-23	13-14	26-57
Sangli *	24-27	39	Drizzling (Thu-Fri) Sangli, Miraj, Shirguppi, Kagvad. Arag - (Light rain Thu and drizzling Fri) No Rain Shirol, Kavate Mahankal, Palus, Valva, Palsi, Shetfal, Vite, Khanapur	Clear	05-21	14-18	54-83
Bijapur *	27-29	39	Drizzling (Sun) -Bijapur, Tikota, Telsang, No Rain - Chadchan	Clear	06-23	14-18	42-70
Hyderabad *	25-27	38-40	Drizzling - Zahirabad (Sun) Medchal (Mon-Tue) No Rain Hyderabad	Clear – Partly cloudy	05-19	18-25	50-70

* 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: 147 days

b) Expected growth stage of the crop: - Harvesting stage.

III. Water 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. 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. Thus, this will reduce the salt load in the soil and at the same time saturate the soil leading to proper sprouting.
3. After Foundation pruning, apply 13,600 to 17,000 L/acre per day during shoot growth 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.

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.

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

No recommendations as on date.

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

Grafted vines:

With the increase in temperature and reduction in relative humidity in the garden, water requirement will increase. There is a need to encourage the vegetative growth for the development of trunk and cordons. Hence the nitrogenous fertilizers like 12:61:0 and urea will play an important role. Application of these fertilizers during evening or early morning will help maintain the growth with proper vigor.

Old vines:

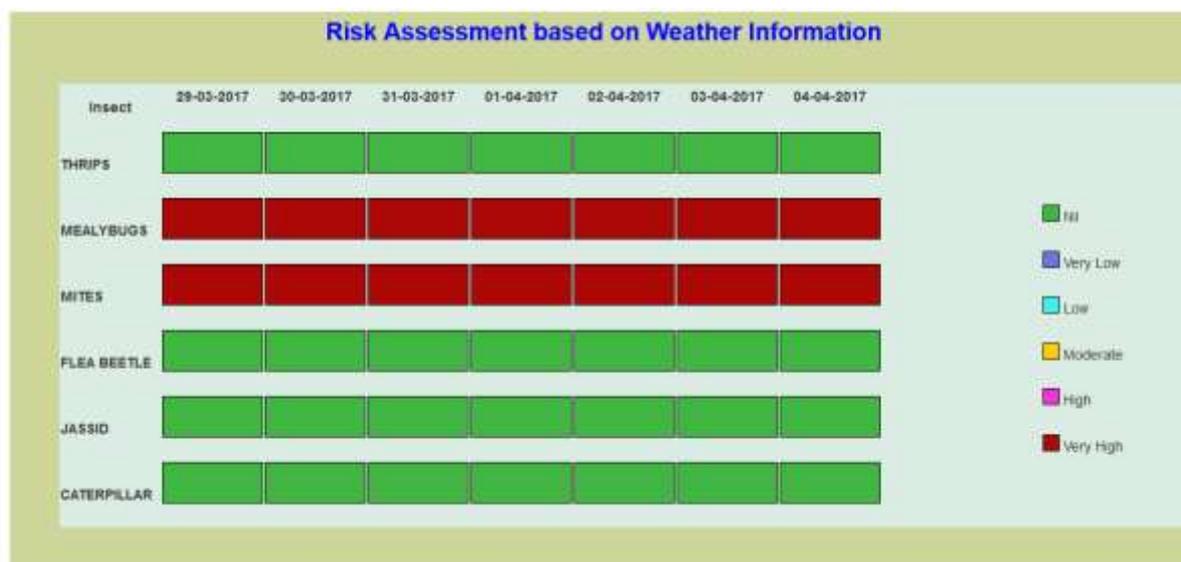
Trench opening at least 12-15 days before the foundation pruning need to be done. The trench of 3 to 4 inch depth and approximately 2 feet wide may be opened. While opening the trench, the roots will be cut and exposed to sun, however, there should not be more than 30% root cut in the trench. Care should be taken that the roots will not be exposed to the direct sun for longer time. This may result into stress to the vine.

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

Days after pruning	Risk of diseases			
	Downy mildew	Powdery mildew	Anthracnose	Others (specify)
143-150	Nil	Nil	Nil	Nil

Dry heat being on the increase there will be delay in sprouting of the vines especially those facing the sun. There might be a prevalence of sunburn or woodiness in the vines. Pruning should be undertaken in cloudy conditions and water spray should be given to the arms between 12 noon and 2PM. Harvesting should be done in the early morning hours to avoid shelf life losses and a pre harvest spray of chitosan @ 2ml/L will have a benefit in maintaining shelf life of berries.

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



- Spot application of buprofezin* 25 SC @ 1.25 ml/L may be given to control localized infestations of mealybugs.
- Sulphur 80 WDG @ 1.5-2.0 g/L water may be given to prevent leaf-fall due to mite infestation.

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.