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 (16/03/2017) - Thursday (23/03/2017)

Location	Temperature		Possibility of Rain	Cloud Cover	Wind Speed (Km/hr)	R H%	
	Min	Max				Min	Max
Nasik	19-24	34-38	**Drizzling** (Thu 16/03) Shirdi and Loni **No Rain** Nasik, Ojhar, Pimpalgaon Baswant, Vani, Palkhed, Dindori, Rahata, Niphad, Kalwan, Devla, Lasalgaon, Satana.	Clear	02-16	15-21	33-50
Pune	21-24	35-39	**Drizzling** (Thu 16/03) Loni Kalbhor, Uruli Kanchan, Yavat, Patas, Supa, Baramati **No Rain** Pune, Phursungi, Rahu,Pargaon, , Narayangaon, Junnar	Clear	02-19	13-21	33-44
Solapur *	24-27	37-40	**Drizzling** (Thu 16/03) Solapur, Vairag, Tuljapur**,** , Kasegaon Atpadi, Pangri, Barshi (Thu 16/03) Osmanabad, Ausa, Latur (Thu- Fri) **Light Rain** (Thu-Fri) Pandharpur Kati, Nanaj	Clear	05-23	11-25	26-72
Sangli *	24-26	37-40	**Drizzling** (Thu 16/03) Sangli Khanapur Kavate Tasegaon Miraj Palus Valva Vite Shirguppi Kagvad Palsi **Light Rain** (Thu-Fri) Shetfal **No Rain** Shirol, Arag, Mahankal	Clear	03-19	08-21	41-67
Bijapur *	24-26	35-39	**Drizzling** (Thu 16/03) Bijapur, Tikota, (Thu-Fri) Chadchan (Thu-Fri) **Light Rain** (Thu-Fri) Telsang,	Clear	05-21	12-31	33-74
Hyderabad *	22-23	32-39	**Drizzling** Hyderabad (Thu-Fri), Medchal (Thu-Fri),Zahirabad (Thu-Fri) **No Rain** Rainlaguda	Clear	03-14	17-42	47-86

*** 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: 140 days

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

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

Expected pan evaporation: 6.5 to 9 mm

Amount of irrigation advised

1. During ripening to harvest stage, apply irrigation through drip @ 11,000 to 12,750 L/acre/day for Nasik, Pune and Hyderabad locations and from 13,600 to 15,300 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 to 3500L/ acre, twice 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 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 calacium carbonate in the root zone along with reduction in soil pH also.

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

No specific recommendations at this stage.

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

With the prediction of rainfall in different areas, there will be advantages and disadvantages in different conditions.

Grafted vines:
Under the rainfall condition, the humidity in the atmosphere will be increased. This will help to increase the vegetative growth after re-cut. Application of nitrogenous fertilizers like urea and other soluble grade fertlilizers containing phosphorous i.e., 12:61:0 and 18:46:0 may be applied to the plants. However, the rainfall will be for shorter duration and may increase the

temperature thereby increasing the water requirement. Hence, the use of mulch may be given priority under water shortage condition.

Old vines:

In the vineyards where the foundation pruning has already been completed, the rainfall may help for easy and faster/early bud sprouts. The rainfall will increase the relative humidity of the atmosphere thereby improving the bud sprouts.

In the vineyards where the harvesting is yet to be started, heavy rainfall may cause berry cracking or reduction in the sugar. However, in the condition of drizzling, there may not be any problem to the grape berries. But, if the temperature starts rizing after the rains, the grape growers may experience the loose bunch or mummification effect. Hence, after rains, the irrigation requirement should be given importance.

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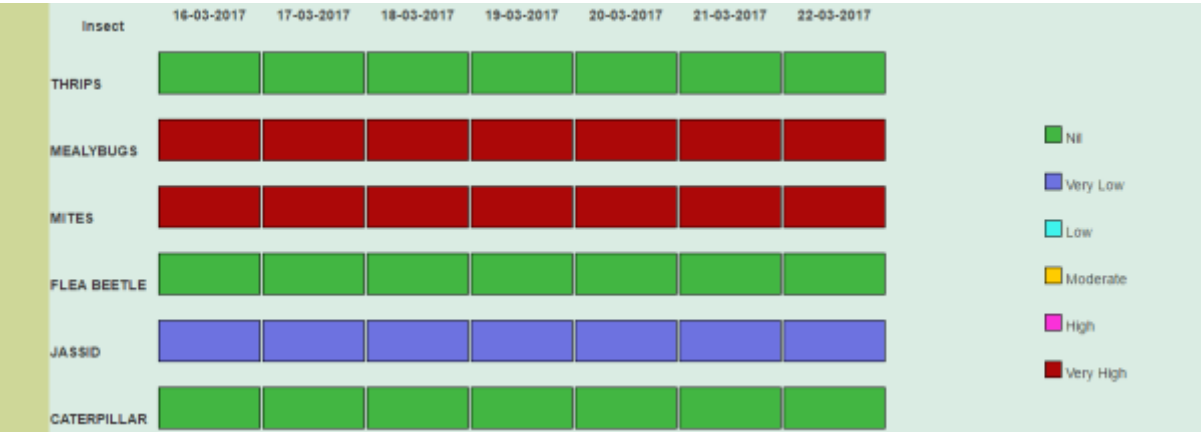
VII. Disease management (Dr. S.D. Sawant and Dr. Sujoy Saha)

Days after pruning	Risk of diseases			
	Downy mildew	Powdery mildew	Anthracnose	Others (specify)
115-121	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)



- Spot application of buprofezin 25 SC @ 1.25 ml/L may be given to control localised 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.