मौसम पूर्वानुमान आधारित साप्ताहिक सलाह
Weather Forecast Based Weekly Advisory

I. Weather Data for the Prevailing Week

Thursday (12/04/2018) - Thursday (19/04/2018)

Location	Temperature (°C)		Possibility of Rain	Cloud Cover	Wind Speed (Km/hr)	R H%	
	Min	Max				Min	Max
Nasik	22-25	37- 40	Nashik Dindori, Vani Baswant, Niphad, Pimpalgaon, Devla, Satana, Ojhar, Palkhed Kalwan **No Rain** Loni Shirdi **Drizzling – Mon Tue Wed**	Clear	04-25	15-18	42-52
Pune	23-25	38-40	Pune, Loni Kalbhor**,** Phursungi Narayangaon, Junnar **No Rain** Uruli Kanchan Patas, Supa, Baramati, Yavat **Light rain** –**Mon Drizzling - Tue Wed**	Mostly Clear	02-18	14-21	39-60
Solapur	28-29	39-43	Solapur, Nanaj, Pandharpur Vairag, Kati Pangri Barshi Osmanabad Tuljapur Latur Ausa Atpadi Kasegaon, **Drizzling – Mon Tue Wed**	Partly Cloudy	04- 24	13-21	30-45
Sangli	24-26	39-40	Sangli, Miraj Shirguppi Kagvad Arag **Good Rain – Mon** Kavatha Mahankal Palus, Valva, Tasgaon Shetfal, Khanapur, Palsi, Vite **Drizzling- Mon Tue Wed**	Partly Cloudy	05-125	18-33	53-75
Bijapur	27-28	38-41	Bijapur Tikota, Telsang **Light rain – Mon Drizzling- Mon Tue Wed** Chadchan **Drizzling- Mon Tue Wed**	Partly Cloudy	02-22	13-24	43-53
Hyderabad	27-28	38-41	Hyderabad, Medchal, Zahirabad **Good Rain – Mon Drizzling- Tue Wed**	Partly Cloudy	03-22	14-26	41-47

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: 8.5 to 11 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 @ 11,560 to 12,920 L/acre per day during shoot growth stage for Nasik, Pune and Sangli region and from 12,920 - 14,960 L/acre per day for Solapur, Hyderabad and Bijapur region.
   b) Saline irrigation water (1.1 – 2.0 dS/m): apply irrigation through surface drip @ 14,450 to 16,150 L/acre per day during shoot growth stage for Nasik, Pune and Sangli region and from 16,150 - 18,700 L/acre per day for Solapur, Hyderabad and Bijapur region.
   c) Mulching the vineyards during this period will reduce the salinity build up in the root zone due to upward movement of saline water from lower soil layer. This will also reduce the irrigation water requirement by another 10%.
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.
4. Cover the cordons of the pruned vines with shadenet, if available, for uniform sprouting as well as reducing the irrigation water needs by 20-25 %. Shadenet coverage will reduce the temperature impact on the cordons. However, remove shadenet after 3-5 leaf stage.
5. If shadenet is not available, spray the cordons with water during the peak heat period i.e. 2-3 pm to reduce the heat effect on the buds.

Rest period to Foundation pruning:

1. Before pruning, test the vineyard soil and irrigation water to plan for soil, nutrient and water management.
2. Apply 10kg Urea, 10 kg DAP and 10 kg Sulphate of Potash/ acre in two splits every 15-20 days.
3. 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:

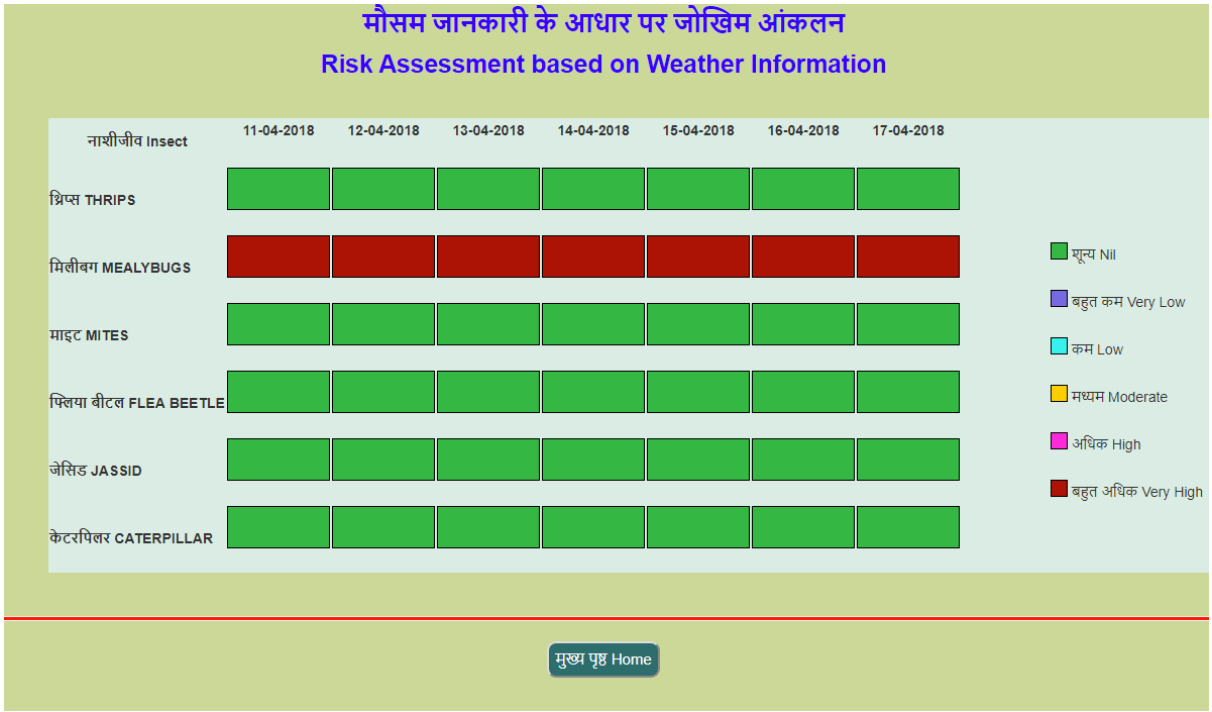
1. Apply FYM/ compost/other organic sources including green manuring atleast 12-15 days before Foundation pruning. If possible mix 200 kg Single super phosphate in the FYM and apply in the soil. Application of organics improves the nutrient and water retention in the root zone and reduces nutrient losses 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.

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

Growth Stage: Dormant bud stage just after back pruning



- Vineyards may have higher mealybug infestation. Buprofezin 25 SC @ 1.25 ml/L water (PHI 45 days) is effective for management of mealybugs.
- 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.