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 (04/01/2018) - Thursday (11/01/2018)

Location	Temperature (°C)		Possibility of Rain	Cloud Cover	Wind Speed (Km/hr)	R H%	
	Min	Max				Min	Max
Nasik	14-19	28- 31	Nashik, Ojhar, Palkhed, Dindori, Vani , Pimpalgaon Kalwan, Devla, Baswant, Satana, Shirdi, Loni Niphad –**No Rain**	Clear	01-28	24-32	49-67
Pune	16-20	30-32	Pune, Phursungi Narayangaon, Junnar Loni Kalbhor, Patas, Supa, Baramati Uruli Kanchan, Yavat –**No Rain**	Clear	00-16	25-34	49-67
Solapur	17-20	31-34	Solapur, Nanaj, Kati Vairag, Osmanabad, Tuljapur Latur, Ausa, Kasegaon, Pandharpur, Atpadi Pangri, Barshi –**No Rain**	Mostly Clear	00-21	24-36	57-67
Sangli	16-19	31-33	Sangli, Miraj, Shirguppi, Kagvad, Palsi, , Vite Arag Shetfal Kavatha Mahankal, Palus, Valva, Tasgaon Khanapur- **No Rain**	Partly Cloudy	01-23	20-33	57-71
Bijapur	17-20	31-33	Bijapur Tikota, Telsang Chadchan - **No Rain**	Partly Cloudy	03-24	24-36	66-74
Hyderabad	14-15	28-29	Hyderabad, Medchal, Zahirabad - **No Rain**	Mostly Clear	06-16	31-44	77- 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. a) Days after pruning: 81 days

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

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

Expected pan evaporation: 3.5 to 5 mm

Amount of irrigation advised

1. From Berry development stage onwards till maturity, apply irrigation through drip @ 6,000- 7,600 L/ acre/ day for Nasik and Hyderabad region and from 7,600 – 8,500 for Pune, Sangli, Solapur and Bijapur region. Further, in case vigour is more than desired, then reduce irrigation water application to 3,500 – 5,000L/ acre. Still if you are not able to control the vigour, stop irrigation till such time growth is controlled.
2. Remember that if the soil is at field capacity (wapsa) then do not irrigate.

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

Berry Development stage:

1. After Berry setting, continue initially with Phosphoric acid application @ 5 kg in two splits this week till 8 mm berry size.
2. If the berry size is from 2-4mm, spray calcium & 2g Calcium Chloride or 0.5 g Ca chelate per litre. Target sprays immediately after GA application (preferably next day) for better absorption.
3. If the berry size is from 5-8mm, spray calcium & 2g Calcium Chloride or 0.5 g Ca chelate per litre. Target sprays immediately after GA application (preferably next day) for better absorption.
4. In the calcareous soil, spray magnesium sulphate @ 3g/L on the vines followed by fertigation of magnesium sulphate @ 10kg/acre from setting till 6-8 mm berry stage.
5. 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 for next two weeks.

Ripening to Harvest stage:

1. Apply Sulphate of potash or 0-0-50 @ 25 kg/ acre in 3-4 splits for next two weeks. Follow this up with Magnesium sulphate @ 10 kg/acre in two splits. Spray Magnesium sulphate in calcareous soil.

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

Application of Ca Nitrate/Chloride (0.5 %) must be done to increase the shelf life of grapes. Avoid use of Ca Chloride if Chloride in Soil or Water is more.

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

1. Old vineyard:

The drop in minimum temperature in the vineyards will hamper the berry growth. To avoid this, sufficient irrigation and mulching may be followed. Under the situation of sudden drop in the minimum temperature, burning the fire in different places in the vineyard will also help to increase the temperature. Covering bunches with paper will help to reduce the incidence f pink berry. Powdery mildew incidence in the vineyard under dense canopy is also seen in majority of the vineyards. Hence, priority of maintaining open canopy should be given in the vineyard.

2. Establishment of new vineyard:

Planting of rootstock can be taken up in the first week of January. Trench opening or ripping depending on the soil type available in the field should be done. Soil and water testing to assess the present status of soil and irrigation water will help for utilization of available resources. In the light and medium soil, spacing between two trenches should be 9 feet while in the heavy soil it can be 10 feet.

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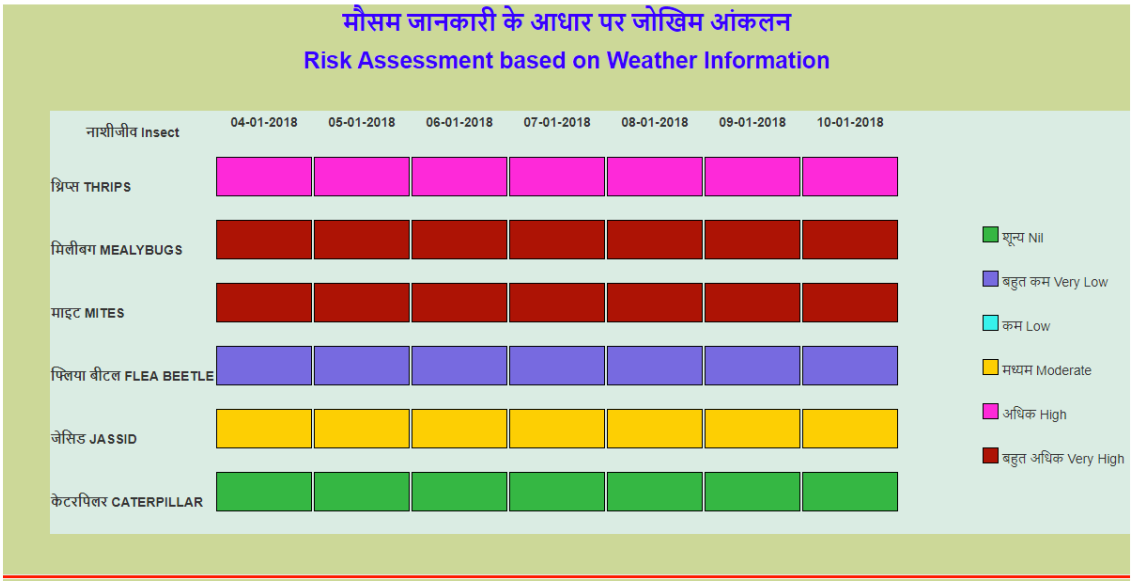
VI. Disease management (Dr. S.D. Sawant and Dr. Sujoy Saha)

Days after pruning	Risk of diseases			
	Downy mildew	Powdery mildew	Anthracnose	Others (specify)
81	Nil	Medium	Nil	Nil

The weather will be clear in most grape growing regions. For powdery mildew management, at post- berry setting stage application of sulphur@ 2-3g/L should be done for powdery mildew control. Care should be taken that there are no spots on the berry due to sulphur application. Application of BCA i.e. soil drench and foliar spray of *Trichoderma* sp and/or *Bacillus* sp and foliar spray of *Ampelomyces quisqualis* may be continued. However, they will work better if applied along with sulphur rather than triazoles and SDHI fungicides. At the berry development stages, application of systemic fungicides viz. Tetraconazole @ 0.75 ml /L or Metrafenone 50% SC @0.25ml/L should be done. Application of silicon – based products are advised to mitigate the cold-induced stress of the vines

Exporters are requested to adhere to the chemicals as given in Annexure 5 of NRL, ICAR-NRCG

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



- Vineyards may have higher mealybug and thrips infestation. Monitoring for thrips should be done by tapping the shoots on white paper and counting number. The monitoring of thrips should be done during afternoon hours and the monitoring for jassids should be done during 6-7 pm in the evening.
- Emamectin benzoate 5 SG @ 0.22 g/L water (PHI 30 days) is effective to manage thrips, jassid and caterpillars.
- Buprofezin 25 SC @ 1.25 ml/L water (PHI 45 days) is effective for management of mealybugs.
- Mite population may start building up in the vineyards, therefore, careful monitoring is essential. Sulphur 80WDG @ 2.0 g/L water is effective against mites.

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.