

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 (18/01/2018) - Thursday (25/01/2018)

Location	Temperature (°C)		Possibility of Rain	Cloud Cover	Wind Speed (Km/hr)	R H%	
	Min	Max				Min	Max
Nasik	13-17	28-31	Nashik, Ojhar, Palkhed, Dindori, Vani , Pimpalgaon Kalwan, Devla, Baswant, Satana, Shirdi, Loni Niphad – No Rain	Clear	00-18	16-27	35-63
Pune	15-18	31-32	Pune, Phursungi Narayangaon, Junnar Loni Kalbhor, Patas, Supa, Baramati Uruli Kanchan, Yavat – No Rain	Clear	00-16	15-27	46-68
Solapur	19-21	33-34	Solapur, Nanaj, Kati Vairag, Osmanabad, Tuljapur Latur, AUSA, Kasegaon, Pandharpur, Atpadi Pangri, Barshi – No Rain	Clear	03-13	24-37	61-48
Sangli	16-18	32-33	Sangli, Miraj, Shirguppi, Kagvad, Palsi, , Vite Arag Shetfal Kavatha Mahankal, Palus, Valva, Tasgaon Khanapur- No Rain	Clear	04-18	10-20	36-61
Bijapur	16-18	31-32	Bijapur Tikota, Telsang Chadchan - No Rain	Clear	06-20	12-23	42-58
Hyderabad	13-15	29-30	Hyderabad, Medchal, Zahirabad - No Rain	Clear	02-13	22-40	57- 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: 95 days

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

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

Expected pan evaporation: 4 to 7 mm

Amount of irrigation advised

1. From Berry development stage onwards till maturity, apply irrigation through drip @ 6,800- 9350 L/ acre/ day for Nasik, Pune and Hyderabad region and from 10,200 – 11,900 for 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 donot irrigate.
3. Flooding the vineyard is not advised as it will lead to wastage of water. Concentrate in the root zone only.

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.
6. In calcareous soil, apply zinc sulphate @ 10 kg/acre along with Ferrous sulphate @ 10kg/ acre after 8-10 mm berry size and before veraison initiation.

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)

1. Flood irrigation should not be given after veraison stage.
2. To avoid pink berry formation, cover bunches with paper bags.
3. Do not apply excess PGRs after veraison stage.

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

1. Old vineyard:

During the coming week, the minimum temperature will be increasing at faster rate. This will lead to increase in demand of irrigation water at the time of berry development. Sudden change in temperature will create the balance between available resource and the actual requirement of the vine. Hence, the symptoms of mummification and rachis drying will be more prominent in the vineyard with more bunch load.

The irrigation based on the PAN reading will help to control the problem. The application of calcium and magnesium through soil upto the period of 25-30 days before veraison will help have to avoid rachis drying.

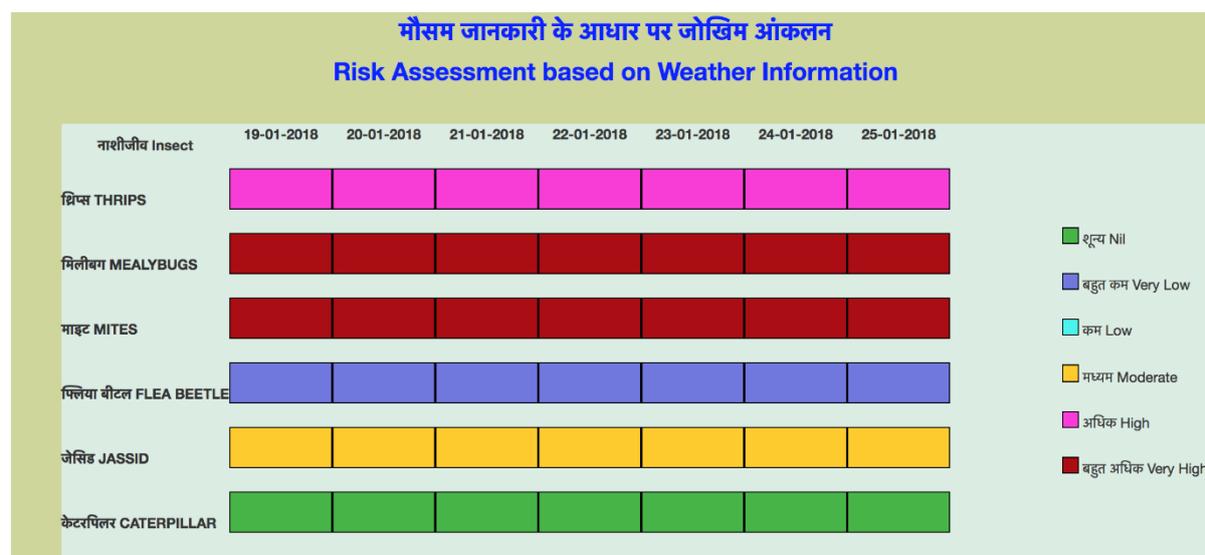
VI. Disease management (Dr. S.D. Sawant and Dr. Sujoy Saha)

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

There is a probability of a drop in temperature after Tuesday. Prior to bagging, powdery mildew infected berries can be removed manually followed by an application of sulphur@ 2-3g/L. 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 if bagging is done in a “cap” like manner sulphur and BCA may be applied later.

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.