

मौसम पूर्वानुमान आधारित साप्ताहिक सलाह

Weather Forecast Based Weekly Advisory

(Assumption: Fruit Pruning date - 15/04/2017)

I. WEATHER DATA FOR THE PREVAILING WEEK Thursday (18/05/2017) -- Thursday (25/05/2017)

Location	Temperature		Possibility of Rain	Cloud Cover	Wind Speed (Km/hr)	R H%	
	Min	Max				Min	Max
Nasik	24-25	36-38	Drizzling Shirdi (Wed) Niphad, Devla, Kelvan (Mon and Wed). No Rain - Vani, Nashik, Pimpalgaon Palkhed, Ojhar, Dindori, Loni, Satana and Rahata	Clear	10-18	26-34	80-87
Pune	22-23	34-36	Drizzling Loni Kalbhor, Uruli Kanchan, Yavat, Supa, Baramati (Wed) Narayangaon, Junnar (Thu) No Rain - Pune, Phursungi, Patas	Clear- Partly Cloudy	08-18	33-39	88-94
Solapur	27-28	40-41	Drizzling Solapur, Nanaj, Kati (Sun) Vairag, Pangri (Thu, Sat, Wed) Osmanabad, Tuljapur, Ausa, Kasegaon (Thur) Pandharpur (Sat, Sun) No Rains - Barshi, Atpadi	Clear - Partly Cloudy	08-21	17-23	45-50
Sangli	24-26	39-41	Drizzling Sangli (Sun, Wed) Miraj, Shirguppi, Kagvad, Arag (Sun & Wed) Palsi (Sun) Khanapur (Thur) No Rain - Kavatha, Palus, Shetfal, Vite, Valva, Tasgaon, Shirol	Clear	13-27	18-24	67-82
Bijapur	26-28	41	Drizzling Bijapur, Tikota (Sun & Wed) Chadchan (Sat, Sun) No Rain - Telsang,	Clear	11-26	16-21	51-62
Hyderabad	28-29	41-42	Drizzling- Hyderabad (Thu & Tue) Medchal (Tue) No Rain- Zahirabad	Clear – partly cloudy	03-21	23-29	37-63

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: 32 days

b) Expected growth stage of the crop: - Forward pruning

III. WATER MANAGEMENT (Dr. A. K. Upadhyay)

Expected pan evaporation: 8.5 to 11 mm

Amount of irrigation advised:

1. After Foundation pruning, apply 14,450 to 15,300 L/acre per day during shoot growth stage for vineyards in Nasik and Pune and 16,150 to 18,700 L/acre per day for Solapur, Bijapur, Sangli and Hyderabad regions during shoot growth stage. During Fruit bud differentiation stage, apply 6000 to 7000 L/ acre / day.
2. Forecasted for drizzling, hence irrigation water application should be based upon the growth of the vines and could be still lower.

IV. NUTRIENT MANAGEMENT (Dr. A. K. Upadhyay)

Foundation pruning season:

Shoot growth stage

1. At shoot growth stage, apply 20 kg urea/ acre in 2 -3 splits after sprouting. In case the soil is calcareous, use ammonium sulphate @ 30 kg/ acre in 2 -3 splits. Do not exceed 65 kg urea or 100 kg Ammonium sulphate on per acre basis during shoot growth stage.
2. In case of vigorous growth of shoots, stop nitrogen application and wait for the growth to stabilize before resuming nitrogen application.
3. In case irrigation water report states sodium content above 100ppm, apply 40 kg SOP/ acre through soil application or 0-0-50 in splits to counter the effect of sodium being supplied through irrigation water.

Fruit bud differentiation stage

1. During fruit bud differentiation stage, based upon soil test values, apply 45 – 50 kg phosphoric acid or 250 kg SSP in case the soils are deficient in phosphorus. Phosphoric acid application is desirable in calcareous soils.
2. At 45 DAP, perform petiole test to know the nutrient content of the vines. The petioles should be collected from 5th leaf from the base of the shoot counting the leaves even if they have been removed.

Keep a close watch on the development of leaf blackening symptoms from the margin. This could be due to sodium toxicity and potassium deficiency

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

No recommendations as on date

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

Vineyard under framework development:

The cordon development after the re-cut of grafted vine is in progress. While developing the cordons and canes, the increase in humidity in the atmosphere will lead to excess vegetative vigor of the growing shoot. Excess vigor will reduce the fruitfulness in a developing bud. Hence, to control the vigor application of potassic fertilizers may be followed. Three to four sprays of 0:52:34 grade fertilizer @ 2.0 g/lit may help to control the vigor and initiate the fruit bud differentiation. During this stage, the leaf curling symptoms will also be seen on about to mature and young leaf. The leaf curl may be due to either potash deficiency (on about to mature leaf) or thrips incidence (on young leaf). Hence, spray of recommended insecticide and 0:0:50 @ 2-3g/lit may help to overcome this problem.

Old vineyard:

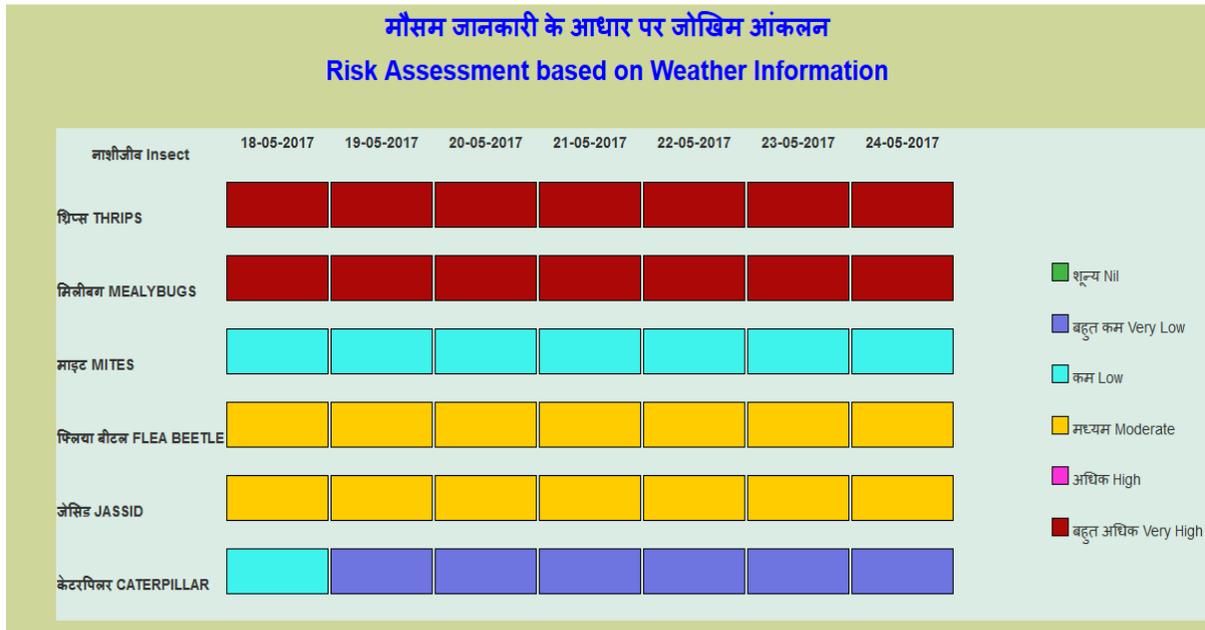
At this stage, the sub-cane development is in progress. However, with the chances of rain or cloudy weather during the coming week, the increase in vigor will be experienced in the grape garden. This will reduce the fruit bud differentiation in the vine. During this stage, uniform sunlight is required on each bud available on a young shoot. At this stage, the growth of side shoots will be faster than the normal. Hence, the removal side shoots at the earliest to be taken up so as to facilitate the buds to absorb sunlight. Under cloudy weather condition, the leaf about to mature will be more prone to powdery mildew incidence. Hence, maintain the open canopy by removing excess shoots and side shoots. This will also help for air circulation in the canopy thereby helping for effective spray coverage.

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

Days after pruning	Risk of diseases			
	Downy mildew	Powdery mildew	Anthraco	Others (specify)
32	Nil	Low	Nil	Nil

Most of the regions will be clear and Sangli, Solapur and Pune regions will be cloudy. There is a possibility of rain in Barshi and Tuljapur regions. If canopy growth is heavy, there could be an incidence of powdery mildew and spray of sulphur is advised @ 2g/L. Triazoles like tetraconazole @0.75ml/L or hexaconazole @ 1ml/L may also be applied

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



- During active shoot growth stage, application of Fipronil 80 WDG 0.06 g/lit OR Emamectin benzoate 5 SG @ 0.22 g/lit will be helpful to control thrips, jassids, flea beetle and caterpillars
- Application of Imidacloprid 17.8 SL @ 0.3 ml/lit will help in control of mealybugs, thrips flea beetle, and jassids. This will also prevent shoot malformation due to sap sucking by mealybugs
- For controlling mealybugs on stems, cordon and shoots, give whole plant wash with Buprofezin @ 1.25 ml/lit using 2.0 lit of spray solution per vine. Spot application of infested vines is advised instead of blanket spraying.
- Due to possibility of drizzling rains and build up of relative humidity application of entomopathogenic fungi viz. *Metarrizium*, *Beauveria* and *Lecanicillium* may be useful for controlling sucking pests and caterpillars.
- Monitoring for stem borers: The adults of stem borer *Stromatium barbatum* start emerging during the last week of May to first fortnight of June. Installation of light traps will be helpful in monitoring the initiation of emergence of stem borer adults. Run the light traps for 3 hours daily, during evening between 7.00 pm – 10.00 pm and destroy the collected beetles in water mixed with insecticide.