

मौसम पूर्वानुमान आधारित साप्ताहिक सलाह

Weather Forecast Based Weekly Advisory

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

I. Weather Data for the Prevailing Week

Thursday (01/06/2017) - Thursday (08/06/2017)

Location	Temperature (°C)		Possibility of Rain	Cloud Cover	Wind Speed (Km/hr)	R H%	
	Min	Max				Min	Max
Nasik	24-25	30-36	Drizzling Nashik, Palkhed, Dindori, Devla- Fri to Sun Shirdi, Loni, Niphad - Thu to Thu Pimpalgaon, Ojhar, Vani- Fri & Sat Kelvan- Thu to Mon, Wed to Thu No Rain Satana and Rahata	Partly-Mostly Cloudy	06-21	44-69	88-91
Pune	22-24	28-33	Drizzling Loni Kalbhori, Uruli Kanchan, Yavat, Supa, Baramati, Patas - Thu - Thu Narayangaon, Junnar - Fri to Sun Phursungi- Fri & Thu Pune- Fri, Tue to Thu	Partly Cloudy	06-19	54-74	92-94
Solapur	23-27	31-37	Drizzling Solapur, Nanaj, Tuljapur, Kati Osmanabad, - Sun to Thu Ausa, Kasegaon, Atpadi, Pangri, Barshi, Latur, Pandharpur - Thu to Thu Moderate Rain Vairag - Sun Latur- Sun & Wed Good Rain Osmanabad, Tuljapur, Ausa- Wed	Clear - - Partly cloudy	05-23	39-69	82-95
Sangli	23-25	30-36	Drizzling Miraj, Shirguppi, Kagvad, Arag, Shetfal, Khanapur, Vite, Sangli, Kavatha, Palsi, Palus, Valva, Tasgaon, Shirol - Thu-Thu Moderate Rain Khanapur- Wed	Partly cloudy	08-26	41-65	84-88
Bijapur	23-26	31-38	Drizzling Bijapur, Telsang,, Tikota, Chadchan- Thu to Thu	Clear - Partly cloudy	05-29	39-65	82-91
Hyderabad	23-27	31-38	Drizzling Hyderabad Medchal, Zahirabad- Thu to Thu Moderate Rain Medchal- Sat-Thu	Clear - Partly cloudy	06-24	49-88	85-100

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: 46 days.

b) Expected growth stage of the crop: 45-65days-Fruit differentiation – Subcane development.

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

Expected pan evaporation: 7.5 to 9 mm

Amount of irrigation advised:

1. After Foundation pruning, apply 12,750 to 15,300 L/acre per day during shoot growth stage for vineyards in all the grape growing regions. During Fruit bud differentiation stage, apply 5000 to 6000 L/ acre / day.
2. Forecasted for drizzling and rains, hence irrigation water application should be based upon the growth of the vines and could be still lower. In case, soil is in wapsa (field capacity) condition, do not apply irrigation

IV. Soil and Nutrient requirement (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. Apply a total of 10-15 kg Magnesium Sulphate and 10 kg Zinc sulphate per acre around 25- 30 days after pruning
4. 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.
3. Keep a close watch on the development of leaf blackening symptoms from the margin. This could be due to sodium toxicity and potassium deficiency. In case the problems are observed, moistened the bund and mix gypsum in the moistened soil @ 100 kg /acre. In case of calcareous soils apply sulphur @ 75kg/acre. This should be followed by application of SOP @ 25-30 kg/acre or 0-0-50 in splits through drip.
4. Apply 10-15 kg Magnesium Sulphate/ acre between 50-60 days after pruning.
5. In calcareous soils, provide foliar application of Magnesium sulphate (@ 3g/L) followed by SOP (@ 4g/L).

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

No recommendations as on date

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

New vineyards

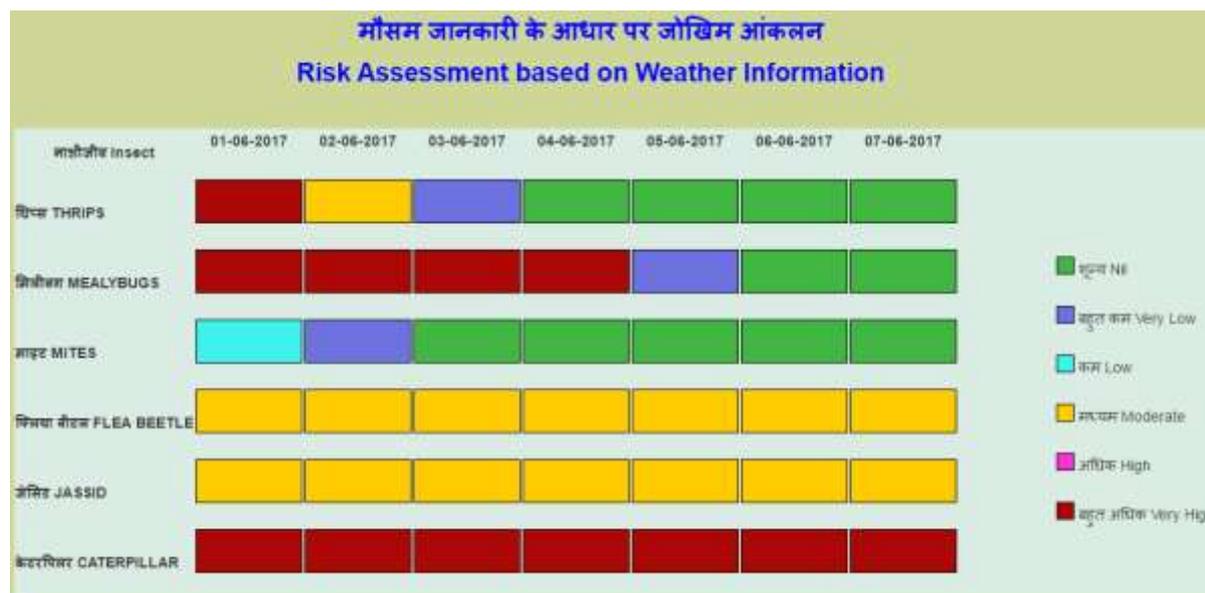
With rainfall during last 2 days, the temperature has been reduced and RH is increased in the atmosphere. Hence, there will be increased vigour. The first instalment of cordon development is over with the initiation of fruit bud-differentiation in the shoots. Considering the weather condition and vigour of vine, the use of PGR and short pinching with removal of side shoots may be given importance.

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

Days after pruning	Risk of diseases			
	Downy mildew	Powdery mildew	Anthracnose	Others (specify)
46	low	Nil	Nil	Nil

Due to the recent showers, temperature in some specific locations might go below 30°C and infection of downy mildew may be seen. Application of potassium salt of phosphoric acid @2g/l +Mancozeb @2g/L for downy mildew control is recommended. If the present rain continues for 3-4 days more, temperature needs to be observed. If it goes below 30°C, then only spray for downy mildew control.

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



- Due to possibility of rains and build up of relative humidity, plant wash with entomopathogenic fungi viz. *Metarrizium*, *Beauveria* and *Lecanicillium* may be useful for controlling mealybug and stem borer adults.
- Do not spray any broad spectrum insecticides for mealybug control as higher humidity will favour development of natural enemies which will slowly kill mealybugs.
- Build up of high humidity will favour incidence of caterpillars. For the management of caterpillars, emamectin benzoate 5 SG @ 0.22 g/litre or lambda cyhalothrin 5 CS @ 0.5 ml/litre or fipronil 80 WG @ 0.06 g/litre water may be given.

- 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. If adult stem borers are noticed, application of fipronil 80 WG @ 0.06 g/litre, lambda cyhalothrin 5 CS @ 0.5 ml/litre or imidacloprid 17.8 SL @ 0.3 ml/litre water may be given directed at main stem and cordons during night.

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.