

# 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 (09/06/2017) - Thursday (15/06/2017)

Location	Temperature (°C)		Possibility of Rain	Cloud Cover	Wind Speed (Km/hr)	R H%	
	Min	Max				Min	Max
<b>Nasik</b>	24-24	26-30	Nashik- Thu to Mon <b>drizzling</b> , Tue to Thu <b>light rain</b> Devla- Fri, Sun to Thu <b>drizzling</b> , Sat <b>moderate</b> rain Shirdi, Loni, Rahata- Thu to Sun, Wed -Thu <b>drizzling</b> , Mon to Tue <b>moderate</b> Niphad- Thu to Thu <b>moderate</b> Pimpalgaon- Thu to Mon <b>drizzling</b> , Tue to Thu <b>moderate</b> Ojhar, Palkhed, Vani, Dindori- Thu to Sat <b>drizzling</b> , Sun to Thu <b>light rains</b> Kelvan - Fri, Sun to Thu <b>drizzling</b> , Sat <b>moderate</b> Satana- Fri, Thu <b>drizzling</b> , Thu, Sun-Wed, Sat <b>moderate</b>	Mostly Cloudy	08-21	66-88	90-97
<b>Pune</b>	22-23	24-29	Pune, Phursungi - Thu to Thu <b>Moderate</b> rain Loni Kalbhor, Uruli Kanchan, Patas Yavat, Supa,- Thu to Sun <b>drizzling</b> , Mon to Wed <b>moderate</b> , Tue <b>good rain</b> Baramati - Fri to Sun <b>drizzling</b> , Mon to Wed <b>light rain</b> , Tue <b>moderate</b> rain Narayangaon, Junnar- Sat & Tue <b>drizzling</b> , Sun to Mon and Wed to Thu <b>moderate</b> rain	Mostly Cloudy	10-23	69-95	94-100
<b>Solapur</b>	23-24	29-33	Solapur- Thu to Sun and Wed <b>drizzling</b> Nanaj - Thu to Sun Wed to Thu <b>drizzling</b> , Tue <b>moderate</b> rain Kati - Thu to Mon and Wed <b>drizzling</b> , Tue <b>moderate</b> rain Tuljapur, Osmanabad - Fri to Sun and Wed <b>drizzling</b> , Mon & Tue <b>light</b> rain, Thu <b>moderate</b> rain Latur- Fri, Sun to Thu <b>drizzling</b> , Thu & Sat <b>light</b> rain, Mon & Tue <b>moderate</b> rain Ausa, Pandharpur- Fri to Sun and Wed to Thu <b>drizzling</b> , Thu and Tue <b>light</b> rain	Mostly cloudy	14-31	61-78	89-97

			Kasegaon - Thu to Sun and Wed <b>drizzling</b> , Mon <b>moderate</b> , tue <b>good</b> rain Atpadi, Pangri, Barshi, - Fri - Sat & Wed <b>drizzling</b> , Sun and Tue <b>moderate</b> , Mon <b>good</b> rain				
<b>Sangli</b>	23-24	28-32	Sangli- Fri to Sat <b>drizzling</b> , Mon to Thu <b>moderate</b> rain, Sun <b>good</b> rain Kavatha- Thu to Sun and Thu to Thu <b>drizzling</b> , Mon <b>good</b> rain Palus, Valva, Tasgaon- Thu to Sun and Wed to Thu <b>drizzling</b> , Mon <b>moderate</b> rain, Tue <b>good</b> rain. Miraj, Shirguppi, Kagvad, Arag- Thu to Sat <b>drizzling</b> , Sun <b>good</b> rain, Mon to Thu <b>moderate</b> rain Shetfal- Thu to Mon <b>drizzling</b> , Tue and Thu <b>light</b> rain Palsi- Thu to Sun <b>drizzling</b> , Mon and Tue <b>moderate</b> rain, Wed and Thu <b>light</b> rain Khanapur- Thu light rain, Fri to Thu <b>drizzling</b> Vite- Thu to Sun and Wed to Thu <b>drizzling</b> , Tue <b>good</b> rain, Wed and Thu <b>light</b> rain. Shirol- Thu to Sat and Wed to Thu <b>light</b> rain, Sat <b>good</b> rain, Sun to Tue <b>moderate</b> rain	Mostly cloudy	16-32	55-80	88-93
<b>Bijapur</b>	23-24	30-33	Bijapur, Tikota- Thu to Wed <b>light</b> rain Telsang- Fri to Sun, Tue to Thu <b>drizzling</b> , Mon <b>light</b> rain, Chadchan- Thu to sun and Wed to Thu <b>drizzling</b> , Mon <b>moderate</b> , Tue <b>good</b> rain	Partly - Mostly cloudy	19-39	58-72	88-93
<b>Hyderabad</b>	23-24	31-32	Hyderabad- Thu to Sun <b>drizzling</b> , Tue to Wed <b>light</b> rain Zahirabad- Thu to Thu <b>light</b> rain Medchal- Thu to tue <b>light</b> rain	Partly - Mostly cloudy	13-35	79-94	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: 53 days.

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

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

Expected pan evaporation: 5 to 6.5 mm

#### **Amount of irrigation advised:**

1. All the grape growing regions are forecasted to receive from drizzle to moderate rains. The irrigation water application should be based upon the growth of the vines. In case rain exceeds 5 mm on a given day, irrigation water application can be skipped for that day. Generally, under wapsa (field capacity) condition of the soil, do not apply irrigation.
2. During shoot growth stage, in case required, apply 8,500 to 11,050 L/acre per day of irrigation water for vineyards in all the grape growing regions. During Fruit bud differentiation stage, apply 3000 to 4000 L/ acre / day.

### **IV. Soil and Nutrient requirement (Dr. A.K. Upadhyay)**

#### **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 5<sup>th</sup> 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).
6. In case of calcareous soils where acute iron deficiency is observed, repeatedly spray 2-3g/L Ferrous sulphate two to three times at 4-5 days interval followed by 15-20 kg/ acre Ferrous sulphate application through drip. The fertigation dose should be split into at least 3 doses of 5kg each.

#### **Cane maturity and Fruit bud development stage:**

1. Potassium application is required from Cane maturity stage onwards. Approx. 64 kg of sulphate of potash (soluble grade) should be applied in this stage. Split the application into at least five doses to reduce the leaching losses of the potassium. Apply 15 kg SOP in two – three splits during this week.

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

Application of 6BA@10ppm followed by uracil @50ppm after 5 days will be beneficial. Uracil must be applied for more fruitfulness in the vineyard

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

### 1. New vineyard

The new growth on developed sub cane will create the dense canopy. This will lead to development of powdery mildew and difficulties in spraying the fungicides. Hence, removal of unwanted side shoots on the sub cane should be given the priority.

Under the condition of delayed re-cut in the vineyard, the vegetative growth might be excess. Hence, under these vineyards, application of 0:0:51 @ 2.0 to 2.5 g/lit or 0:52:34 @ 2.0 to 2.5 g/l through spray can be given.

### 2. Old vineyard

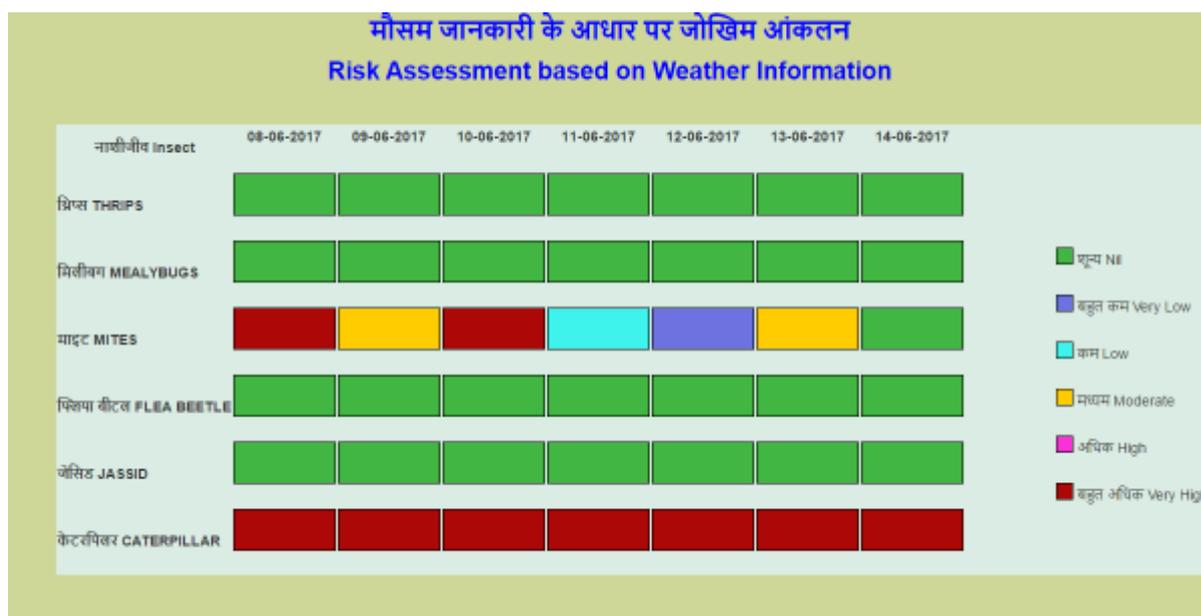
Under the condition of heavy black cotton soil, growth of side shoots (at 7-8 leaf stage after sub cane) will be at faster rate. This will delay the cane maturity. Hence, control of irrigation and application of potassic fertilizer may be given importance.

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

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

Anthraco nose may be visible in the new sprouts due to the recent showers, and a tank-mix of thiophenate methyl @ 1g/L + Mancozeb @ 2g/L will control the diseases. Temperature in some specific locations might go below 30°C or there may be an incidence of morning dew 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..

## 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. *Metarhizium*, *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.
- In case of heavy mite infestation, foliar application of sulfur 80WDG @ 2.0 g/litre water may be given.
- 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.
- 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](mailto:director.nrcg@icar.gov.in).