

# मौसम पूर्वानुमान आधारित साप्ताहिक सलाह

## Weather Forecast Based Weekly Advisory

(Assumption: Pruning date-15/04/2016)

### I. Weather Data for the Prevailing Week

Thursday (21/07/2016) - Thursday (28/07/2016)

Location	Temperature		Possibility of Rain	Cloud Cover	Wind Speed (Km/hr)	R H%	
	Min	Max				Min	Max
<b>Nashik</b>	21-22	24-29	<b>Thu-Thu Light Rain</b> Nashik, Pimpalgaon, Ojhar, Dindori, Vani, Palkhed <b>Mon Moderate Rain</b> Shirdi, Loni, Rahata, Chanvad <b>Mon Light Rain</b> Kalwan, Devla, Niphad, Satana, Chandwad, Lasalgaon <b>Tue-Thu Light Rain</b> Yeola.	Cloudy	00-18	72-85	94-100
<b>Pune</b>	21	25-29	<b>Thu-Thu Light Rain</b> Pune, Phursungi, Narayangaon, Junnar, Baramati <b>Sun-Tue Light Rain</b> Loni Kalbhor, Uruli Kanchan, Yavat, Rahu, Supa, Kedgaon, Patas, Pargaon	Cloudy	08-26	64-74	94-98
<b>Solapur</b>	22	27-32	<b>Mon-Tue Light Rain</b> Solapur, Nanaj, Vairag, Barshi, Kasegaon, Pangri, Kati, Kari, Atpadi <b>Thu, Sun and Wed Light Rain</b> Tuljapur <b>Sun Light Rain</b> Latur, Ausa, Osmanabad <b>Fri, Sun-Tue Light Rain</b> Pandharpur	Cloudy	02-21	58-74	90-94
<b>Sangli</b>	20-21	24-28	<b>Fri, Mon-Tue Moderate Rain</b> Sangli, Miraj, Shirguppi, Arag, Bedag, Kagwad, Shirol.  <b>Mon-Thu Light Rain</b> Tasgaon, Kavate Mhankal, Palus, Valva, palsi, shetfal, Vite <b>Thu-Fri Light Rain</b> Khanapur	Cloudy	08-21	67-82	94-98
<b>Bijapur</b>	21	25-29	<b>Light Rain</b> <b>Fri, Mon-Tue</b> Bijapur, Tikota, Telsang <b>Mon-Tue</b> Chadchan	Cloudy	08-26	64-74	94-98

Location	Temperature		Possibility of Rain	Cloud Cover	Wind Speed (Km/hr)	R H%	
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Hyderabad	21	24-28	<b>Light Rain</b> <b>Thu- Sun</b> Medchal, Rainlaguda, Hyderabad  <b>Light Rain</b> <b>Thu- Fri, Sun- Mon</b> Zahirabad	Cloudy	10-18	66-75	91-95

## II. a) Days after pruning:

### b) Expected growth stage of the crop

90-140 days- Buildup of storage

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

**Expected pan evaporation: 0-4 mm**

All recommendations are per acre/hectare basis.

### Amount of irrigation advised:

Presently the vines are at Cane maturity and Fruit Development stage. In general there will be no need to apply irrigation as the soils are already at field capacity (wapsa condition). Irrigate the vineyard only if the vines start showing moisture stress i.e. leaf cupping/ curling. Then, apply irrigation through drip @ 5,600 litre/ha/day.

## IV. Nutrient requirement (Dr. A.K. Upadhyay)

### Through fertigation:

1. Potassium needs to be applied through drip during this stage.
2. 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 atleast 3 doses of 5kg each.
3. The vineyards where sodicity problems are there, apply gypsum to the soil for removal of sodium from the soil exchange complex. In case of calcareous soils, use sulphur for similar purpose.
4. In case pruning is scheduled during August, green manuring with Sunnhemp / Dhanicha is advised. In sodic soils, dhaincha is preferred

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

At present no application of growth regulators is required.

## VI. Any specific recommendation for canopy management (Dr. R.G. Somkuwar)

Under the condition of light rains and higher relative humidity, there will be profuse vegetative growth leading to delay in cane maturity. Hence, shoot tipping may be given due importance.

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

In places of moderate rainfall, incidence of downy mildew is likely and it can be controlled by application of potassium salt of phosphorous acid 2-3 g/L + mancozeb 2.0 g/L as tank mix or copper based fungicides (Bordeaux mixture 0.5% or copper hydroxide 1.5 g/L or copper oxychloride 3.0 g/L). Special care needs to be taken regarding observation of the rainfall pattern. In areas where there was an application of fungicides prior to rainfall, repeat application of the same may be done after the rainfall. Tank mix of sulphur @ 1.5 – 2.0 g/L and copper based fungicides at their aforementioned doses in the above situation will mitigate both powdery and downy mildew. In all the cases mentioned above, follow-up application of chitosan 10% @ 2ml/L should be done for better efficacy of the fungicides by preventing their wash off during the rains.

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

### Risk levels of different insects

Thrips	Caterpillar	Mealybug	Jassids	Flea beetle	Mites
Low to Moderate	High	Low to Moderate	Low	Low	Moderate

- As relative humidity will remain high in most of the grape growing areas, the caterpillar (*Spodoptera litura*) infestation may continue. *Spodoptera litura* Nuclear Polyhedrosis Virus may be used for biological control of these caterpillars. Alternatively, emamectin benzoate 5 SG @ 0.22 g/liter water can be given.
- As relative humidity is increasing, the activity of mealybug natural enemies such as predatory coccinellids and parasitoids will increase and help in reducing mealybug population. Avoid spraying broad spectrum insecticides to conserve these natural enemies. If ant population is noticed, application of entomogenous fungi, *Metarhizium anisopliae* @ 10<sup>6</sup> cfu/ml can be given. The prevailing high humidity will help in establishing this entomogenous fungi and managing both ants and mealybugs.
- For the management of mites, sulphur 80 WDG @ 2.0 g/L water is effective.
- Excess shoot growth due to high humidity conditions may help to build up thrips population and reduce coverage during insecticide applications, therefore, excess shoot growth should be removed to reduce thrips incidence.
- Pre harvest interval (PHI) mentioned in the Annexure V of the Residue Monitoring Plan (RMP) should be adhered to.

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).