

मौसम पूर्वानुमान आधारित साप्ताहिक सलाह

Weather Forecast Based Weekly Advisory

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

I. Weather Data for the Prevailing Week

Thursday (18/08/2016) - Thursday (25/08/2016)

Location	Temperature		Possibility of Rain	Cloud Cover	Wind Speed (Km/hr)	R H%	
	Min	Max				Min	Max
Nashik	22-23	26-27	Sat and Mon Light Rain Nasik, Pimpalgaon Baswant, Palkhed, Ojhar, Vani No Rain in Other Grape areas	Cloudy	14-24	74-84	95-97
Pune	22-23	27-28	Thu-Tue Light Rain Pune, Phursungi, Fri – Wed Light Rain Narayangaon, Junnar, No Rain in Other Grape areas	Mostly Cloudy	13-26	71-78	92-95
Solapur	23	31-32	No Rain Solapur, Nanaj, Vairag, Barshi, Kasegaon, Pangri, Kati, Kari, Atpadi, Tuljapur Latur, Ausa, Osmanabad, Pandharpur	Cloudy to Mostly Cloudy	14-26	51-57	86-90
Sangli	22-23	28-29	No Rain Sangli, Miraj, Shirol, Tasgaon, Palus, Valva, Shirguppi, Arag, Bedag, Kagwad, Kavate Mahankal, Shetfal, Palsi, Khanapur, Vite.	Mostly Cloudy	14-29	66-71	92-97
Bijapur	22	30-31	No Rain Bijapur, Tikota, Telsang, Chadchan	Partly to Mostly Cloudy	19-32	51-58	89-93
Hyderabad	21-23	29-30	No Rain Hyderabad, Zahirabad, Medchal, Rainlaguda.	Partly to Mostly Cloudy	08-24	60-64	61-96

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:

b) Expected growth stage of the crop

90-140 days- Buildup of storage

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

Expected pan evaporation: 0-6 mm

All recommendations are per acre/hectare basis.

Amount of irrigation advised:

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 @ 3420 litre/acre/day.

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

Through fertigation:

1. 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.
2. In case pruning is scheduled during August, green manuring with Sunnhemp / Dhaincha is advised. In sodic soils, dhaincha is preferred.
3. If Fruit pruning is planned during 1-10th Sept., go for soil and water testing for proper nutrient and water management.

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

No application of growth regulators is required during the present growth stage of the crop.

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

1. **Timely pruned vineyard:** Under the condition of light rains with high R. H. (80% and more), there will be new growth. Most of the time the new growth is pinched to avoid the loss of nutrients and advance the cane maturity. In some gardens, the main bud on the sub cane is getting sprouted (tiger bud). This will results into no bunch after fruit pruning. It is therefore advised to allow such shoots to grow upto 3-4 leaf and light pinching on the shoot tip be done. This will help to avoid the sprouting of bud.
2. **Rootstock planted gardens:** During this period, the temperature is above 30°C and the relative humidity is also more than 80%. Hence, the present period can be considered to be ideal for grafting. Selection of scion should be taken from completely matured cane.

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

As there is no threat of immediate rains, the cloudy conditions will predispose the vines to powdery mildew disease. Application of sulphur @ 1.5 – 2.0 g/L is recommended. Light rains might occur in Nashik region during Mon-Wed. A 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. Application of biocontrol agents like *Bacillus* sp @ 2g/L or *Trichoderma* sp @ 4g/L or *Ampelomyces* sp @ 4-5g/L are advised during this stage. There should be no application of copper based fungicides.

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

Risk levels of different insects

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

- Due to prevalence of high relative humidity coupled with drizzling rains and cloudy conditions in most of the grape growing areas, the caterpillar (*Spodoptera litura*) infestation may continue. *Spodoptera litura* Nuclear Polyhedrosis Virus (SINPV) @ 250 LE/ha may be used for biological control of these caterpillars. Alternatively, emamectin benzoate 5 SG @ 0.22 g/liter water can be given.
- With high relative humidity, 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* @ 10⁶ 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.

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.