

मौसम पूर्वानुमान आधारित साप्ताहिक सलाह

Weather Forecast Based Weekly Advisory

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

I. Weather Data for the Prevailing Week

Thursday (11/08/2016) - Thursday (18/08/2016)

Location	Temperature		Possibility of Rain	Cloud Cover	Wind Speed (Km/hr)	R H%	
	Min	Max				Min	Max
Nashik	22-23	26-28	Thu-Thu Very Light Rain Nasik, Dindori, Ojhar, Vani, Pimpalgaon Baswant, Palkhed, Shirdi, Loni, Rahata, Satana, Kalvan Devla, Chandvad, Niphad, Lasalgaon, Yeola	Partly Cloudy	14-29	77-80	89-94
Pune	22-23	26-28	Thu-Sun and Thu Light Rain Pune, Phursungi, Narayangaon, Junnar, Drizzling to Very Light Rain in full week Loni Kalbhor, Uruli Kanchan, Yavat, Rahu, Pargaon, Patas, Supa, Baramati	Partly Cloudy	16-31	70-74	88-94
Solapur	23	30-31	No Rain Solapur, Nanaj, Vairag, Barshi, Kasegaon, Pangri, Kati, Kari, Atpadi, Tuljapur Latur, Ausa, Osmanabad, Pandharpur	Cloudy to Overcast	14-29	59-64	86-91
Sangli	22-23	27-28	Thu-Thu Very Light Rain Sangli, Miraj, Shirol. Thu-Thu Drizzling Tasgaon, Palus, Valva, Shirguppi, Arag, Bedag, Kagwad, Kavate Mahankal, Shetfal, Palsi, Khanapur, Vite.	Partly Cloudy	16-32	67-74	88-94
Bijapur	22	29	No Rain Bijapur, Tikota, Telsang, Chadchan	Partly Cloudy to Overcast	21-35	61-64	91-93
Hyderabad	22-23	29-31	No Rain Hyderabad, Zahirabad, Medchal, Rainlaguda.	Partly Cloudy to Overcast	13-27	63-69	85-89

* Till 25th Aug – No major Rain in any Grape areas, cloudy condition and drizzling may continue.

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: 0-5 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 @ 2800 litre/acre/day.

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

Through fertigation:

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. 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)

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. (60- 80%), there will be new growth. Disease incidence will be more on the young shoots. Control of shoot growth by shoot pinching will help to control the growth. Spray of potash@ 4-5g/litre water may help to advance the cane maturity.
- 2. Rootstock planted gardens:** Shoot thinning and retention of three straight growing and strong shoots of rootstock 6-7 days before grafting should be done.

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

The cloudy conditions with light drizzle will predispose the vines to powdery mildew disease. Application of sulphur@ 1.5 – 2.0 g/L is recommended. 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 mineral oil@ 2ml/L will also help in removal of water droplets from the leaf surface. Rust might also be incident in some locations and root stocks are usually affected by the disease first. Application of copper based fungicides (Bordeaux mixture 0.5% or copper hydroxide 1.5 g/L or copper oxychloride 3.0 g/L) to control rust in root stocks may be done. However, if the disease is visible in leaves, application of chlorothalonil 50 WP @ 2g/ L or hexaconazole 5SC@ 1ml/L should be applied. In general, use of copper based fungicides should be restricted as during end-August application of biocotrol agents is predicted and copper fungicides are not compatible with them

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 to Moderate	High	Low to Moderate	Low	Low	Moderate

- 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.