

मौसम पूर्वानुमान आधारित साप्ताहिक सलाह

Weather Forecast Based Weekly Advisory

(Assumption: Fruit Pruning date - 15/04/2018)

I. Weather Data for the Prevailing Week

Thursday (26/07/2018) -- Thursday (02/08/2018)

Location	Temperature (°C)		Possibility of Rain	Cloud Cover	Wind Speed (Km/hr)	R H%	
	Min	Max				Min	Max
Nasik	22-23	25-26	Nashik, Pimpalgaon Baswant, Ojhar, Dindori, Vani, Palkhed, Loni, Shirdi, Niphad, Kalwan, Devla, Satana: Light Rain - Thu to Thu	Cloudy	21-29	83-92	92-96
Pune	23	26-27	Pune, Phursungi: Drizzling - Thu to Wed. Moderate Rain – Thu. Loni Kalbhor, Uruli Kanchan, Yavat, Patas, Supa, Baramati, Narayangaon, Junnar : Drizzling - Thu to Thu	Cloudy	16-24	75-80	86-91
Solapur	23-24	30-32	Solapur, Kati, Nanaj, Vairag, Pandharpur, Barshi, Pangri Osmanabad, Tuljapur, Latur, AUSA Kasegaon & Atpadi, Drizzling – Thu to Thu	Partly Cloudy	12-26	59-66	84-87
Sangli	22-23	27-28	Sangli, Miraj, Kagvad, Arag, Shirguppi : Drizzling – Thu to Sat, Mon & Wed. Light Rain- Sun, Tue, Thu Kavathe Mahankal, Palus, Valva, Tasgaon, Shetfal, Palsi, Vite, Khanapur Drizzling – Thu to Thu	Cloudy	14-28	73-78	91-93
Bijapur	22-23	29-30	Bijapur, Tikota, Telsang, Chadchan: Drizzling – Thu to Thu.	Cloudy	19-33	64-68	87-89
Hyderabad	22-23	29-30	Hyderabad Drizzling – Thu to Mon & Wed. Light Rain-Tue & Thu Zahirabad, Medchal: Drizzling- Thu to Thu	Cloudy	19-30	62-66	84-89

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: 100 days

b) **Expected growth stage of the crop:** Cane maturity and afterwards stage after foundation pruning

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

Expected pan evaporation: Nil to 4 mm

Amount of irrigation advised

1. All the grape growing regions are forecasted to receive from drizzle to light/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, donot irrigate the vineyard.
2. In general, there will not be any need to provide irrigation in areas which have witnessed continuous rains since last 3-4 days.
3. The vineyards are at Cane maturity and Fruit Development stage. Provide irrigation through drip @ 3500 - 4000 litre/ha/day in case no rains are received.
4. To leach out the salts from the rootzone, it is important to remove mulch/ plastic from the bunds, so that the salts can be washed out from the rootzone. Then the bunds can be mulched again after the monsoon season.

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

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.
2. The rains have started. 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.
3. 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.
4. In case pruning is planned during September, raise Sunnhemp or Dhaincha for green manuring purpose.

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

Nil.

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

Old vineyard:

Cane maturity in relation to changes in weather condition will be crucial during this week. With the rainfall, high vigor of the growing shoots will be experienced. This will lead to delay in cane maturity. The growing shoot will be more prone to anthracnose and downy mildew infection. Hence, removal of growing shoots above requirement need to be removed or pinched off. This will help to advance the cane maturity and control the diseases.

Rootstock garden:

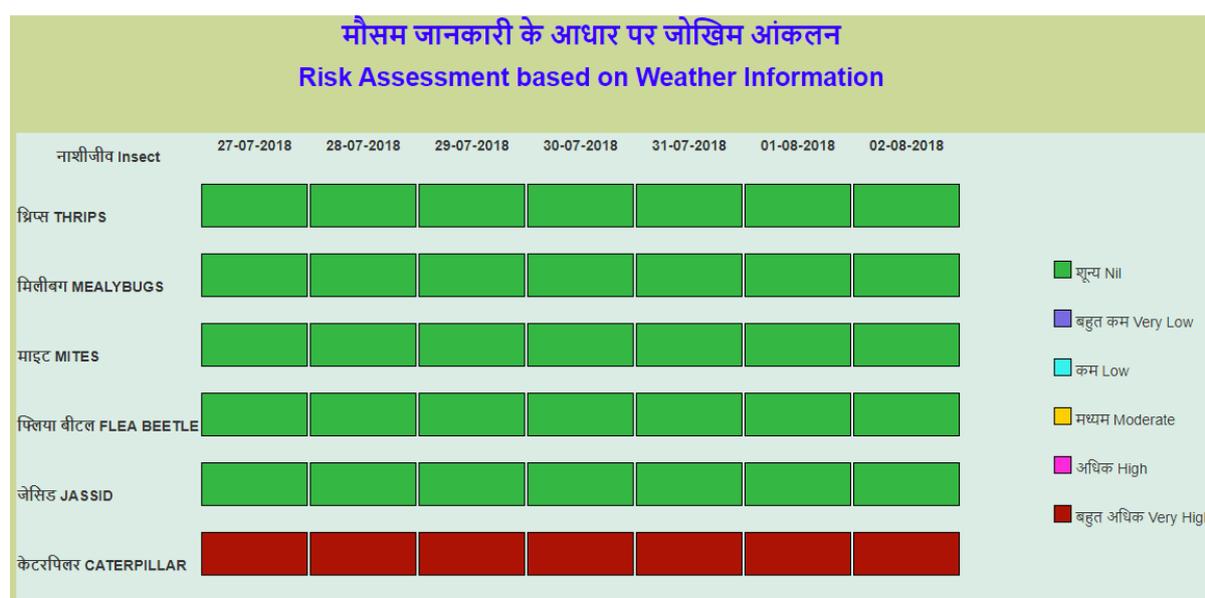
In this garden, the old leaf of rootstock suffers from rust infestation. Hence, for control suitable measures need to be taken up. However in new shoot, training to the bamboo will help for obtaining straight trunk after grafting. Tying of these shoots to the bamboo should be given priority before grafting.

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)
100	Moderate	Moderate	High	Bacterial leaf spot, Rust

An application of thiophenate methyl @ 1g/L + Mancozeb @ 2.5g/L in a tank mix which will give a control of rust and bacterial spot along with a suppression of powdery mildew is recommended. After 2-3 days of this application, triazoles may be applied for the control of powdery mildew. (Hexaconazole/Difenoconazole/Tetraconazole). In regions where only powdery mildew is prevalent application of sulphur @2g/L should be done. Biocontrol agents like *Trichoderma* sp, *Bacillus subtilis* and *Ampelomyces quisqualis* may be applied along with sulphur but not with copper fungicides. 2-3 sprays of biocontrol agents may be given during this period when the RH is high and temperature is low.

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



- Spraying of emamectin benzoate 5 SG @ 0.22 gram per litre water or fipronil 80 WG @ 0.06 gram per litre water is effective to manage caterpillars.
- Remove excess shoot to manage thrips populations.
- Vineyards may have higher mealybug infestation as well. However, increase in relative humidity will favour build-up of natural enemies and natural biological control of mealybugs. Therefore, avoid spraying broad spectrum insecticides. Use of insecticides for mealybug control should be avoided. Entomogenous fungus such as *Metarhizium*, *Beauveria* and *Lecanicillium* can be used for plant wash at 15 days interval to reduce mealybug populations. If, insecticide application seems inevitable, the only buprofezin 25 SC @ 1.25 ml/L water may be used for management of mealybugs as this insecticide does not harm beneficial organisms in the vineyard.
- Mite infestation may be observed on old leaves at some places. Spraying of sulphur 80 WDG @ 2.0 gram per litre water is effective to manage mites.

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.