

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 (20/07/2017) - Thursday (27/07/2017)

Location	Temperature (°C)		Possibility of Rain	Cloud Cover	Wind Speed (Km/hr)	R H%	
	Min	Max				Min	Max
Nasik	22-23	24-26	Nashik -Thu to Fri and Sun to Thu drizzling , Sat light rain Shirdi - Fri to Thu drizzling , Thu moderate rain Loni, Rahata - Sun to Thu drizzling , Thu moderate rain Pimpalgaon - Tue & Thu drizzling , Thu, Fri, Sun to Wed light rain , Sat moderate rain Niphad - Mon to Thu drizzling , Thu, Fri moderate rain , Sat, Sun good rain Palkhed, Ojhar, Vani. Dindori- Thu & Tue drizzling , Fri, Sun, Mon, Wed and Thu light rain , Sat moderate rain Kelvan, Devla, Satana - Mon to Thu drizzling , Thu, Fri light rain , Sat & Sun moderate rain	Cloudy	11-24	87-95	96-99
Pune	21-22	24-25	Pune, Phursungi,- Thu to Thu moderate rain Uruli Kanchan, Loni Kalbhor, Yavat, Patas, Supa, Baramati – Fri to Thu drizzling , Thu moderate rain Junnar, Narayangaon - Thu, Sun to Thu light rain , Fri, Sat good rain	Cloudy	14-24	89-97	99-100
Solapur	22 - 23	27-29	Solapur, Nanaj - Fri to Thu drizzling , Thu light rain Vairag, Kati - Sat to Thu drizzling , Thu light rain , Fri good rain Osmanabad, Tuljapur - Fri to Thu drizzling , Thu light rain Kasegaon, Atpadi, Latur, AUSA, Pandharpur- Sat to Thu drizzling , Thu & Fri light rain Pangri, Barshi - Thu, Sat to Thu drizzling , Fri moderate rain	Cloudy	11-27	66-82	94-97
Sangli	22 - 23	26 - 29	Sangli, Miraj- Mon to Thu drizzling , Fri to Sun light rain , Thu Kavatha Palsi - Fri to Thu drizzling , Thu moderate rain Palus, Valva, Tasgaon, Vite, Shetfal - Fri to Thu drizzling , Thu light rain	Mostly Cloudy	14-32	66-81	91-93

Location	Temperature (°C)		Possibility of Rain	Cloud Cover	Wind Speed (Km/hr)	R H%	
	Min	Max				Min	Max
			Khanapur- Thu to Thu drizzling Shirguppi- Fri to Thu drizzling , Thu good rain Kagvad- Sun to Thu drizzling , Fri,sat light rain , Thu good rain Arag - Tue, Wed drizzling , Fri to Mon light rain , Thu good rain				
Bijapur	23	29-32	Bijapur, Tikota, Telsang, - Thu to Thu drizzling Chadchan - Fri to Thu drizzling , Thu light rain	Partly cloudy	16-37	57-74	91-93
Hyderabad	23	29-31	Hyderabad, Medchal - Thu to Thu drizzling Zahirabad – Fri to Thu drizzling , Thu light rain	Cloudy	08- 27	65-79	91-99

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: 95 days.

b) **Expected growth stage of the crop:** Post cane maturity resting stage

III. Nutrition and irrigation management (Dr. A.K. Upadhyay)

Pan evaporation: 2 – 4 mm

1. All the grape growing regions are forecasted to receive from drizzle to good rains. The irrigation water application should be based upon the growth of the vines. Generally, under wapsa (field capacity) condition of the soil, donot apply irrigation. In general, there will not be any need to provide irrigation in areas which have witnessed continuous rains since last 3-4 days.
2. Provide irrigation through drip @ 2500 - 3500 litre/ha/day in case no rains are received. Observe the vine growth before irrigation water application.

Nutrient management:

1. The vines are at Cane maturity and Fruit bud development stage.
2. Potassium application is required from Cane maturity stage onwards. Approx. 64 kg of sulphate of potash (soluble grade) should be applied in this stage. Apply 15 kg SOP in two – three splits during this week.
3. Apply magnesium sulphate @ 10kg/ acre in two splits.
4. 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.
5. 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.
6. In case pruning is planned during August to 1st week of September, raise Sunnhemp or Dhaincha for green manuring purpose.

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

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

Rootstock management:

On the old leaf of rootstock plants, rust will be a serious problem during the rainy period. The organism sucks the sap from the leaf leading to leaf fall. This will result into the loss of storage of food material. The shoot growth will also be stunted. Such type of shoots cannot be grafted with the desirable scion. Hence, the rootstocks to be sprayed with Chlorothalonil @ 1.5 g/lit) will help to reduce the incidence.

Removal of completely matured shoots and retention of semi matured shoots so that the grafting success will be higher.

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

Days after pruning	Risk of diseases			
	Downy mildew	Powdery mildew	Anthraco	Others (specify)
95	Moderate	Moderate	Moderate	Moderate bacterial leaf spot

There is a probability of light to moderate rains in all grape growing regions. Application for downy mildew control needs to be done viz. application of potassium salt of phosphoric acid @2g/l +Mancozeb @2g/L. After the rain subsides, there can be a high incidence of powdery mildew and application of sulphur 80WDG @ 2g/L or dusting of sulphur 80%WG @ 5-6 kg /acre should be done for the control of powdery mildew. Chitosan may be tank mixed with sulphur @ 2g/L. Incidence of bacterial spot may be seen in areas where temperature is slightly high and application of mancozeb @ 2g/L will reduce the infection.

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



- Caterpillar (*Spodoptera litura*) infestation may increase in most of the grape areas as humidity is increasing. For the management of caterpillars, emamectin benzoate 5 SG @ 0.22 g/litre or fipronil 80 WG @ 0.06 g/litre water may be given.

- Mealybug population and movement of ants may be noticed under the bark. 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 mealybugs and ants.
- Do not spray any broad spectrum insecticides such as chlorpyrifos, dichlorvos, methomyl, profenophos, etc. for mealybug control. Higher humidity will favour development of natural enemies which will slowly kill mealybugs. In case chemical spray is required, prefer buprofezin 25 SC @ 1.25 ml per litre of water for plant wash.
- Mite infestation may also be observed on older leaves in areas not experiencing good rainfall. In such cases, foliar application of sulphur 80 WDG @ 2.0 g/litre water may be given.
- Incidences of new species of stem borer (red colour larva) may be noticed under bark in Sangali, Solapur, Nashik, Pune, Bijapur grape areas. Remove the loose bark and give good plant wash mainly targeting cordons and main trunk with broad spectrum insecticides, for example, lambda cyhalothrin 5 CS @ 2.5 ml/l.



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.