# 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 (07/09/2017) - Thursday (14/09/2017)

Location	Temperature (°C)		Possibility of Rain	Cloud Cover	Wind Speed	R H%	
	Min	Max	_ Tossibility of Rain	Cloud Cover	(Km/hr)	Min	Max
Nasik	22-23	30-31	Nashik <b>Drizzling-</b> Sun to Tue <b>Light Rain -</b> Wed & Thu Niphad <b>Drizzling-</b> Sun & Mon <b>Light Rain -</b> Tue & Wed <b>Moderate -</b> Thu Ojhar, Palkhed, Dindori, Vani Pimpalgaon <b>Drizzling-</b> Sun to Thu Kalwan, Devla, Baswant, Satana <b>Drizzling-</b> Sun to Tue <b>Light Rain -</b> Wed & Thu Shirdi, Loni, , - <b>Drizzling-</b> Thu to Sun <b>Light Rain -</b> Mon to Thu	Partly Cloudy	00-16	63-75	92-98
Pune	23	27-31	Pune, Phursungi — <b>Drizzling</b> Sat To Mon & Thu <b>Light Rain</b> - Tue & Wed Loni Kalbhor, Uruli Kanchan, Yavat, Patas, Supa, Baramati, - <b>Drizzling</b> Thu to Sun <b>Light Rain</b> - Mon to Thu Narayangaon, Junnar - <b>Drizzling</b> Sun & Thu <b>Light Rain</b> - Mon to Wed	Partly Cloudy	00-14	54-75	92-97
Solapur	23- 24	30-32	Solapur, Nanaj Drizzling- Thu,Sat, Mon & Thu Light Rain - Fri,Sun,Tue,Wed Vairag, Barshi Drizzling- Thu to Sun Light Rain - Mon to Thu Kati Drizzling -Thu,Sat, Mon, Wed& Thu Light Rain - Fri, sun, Tue Osmanabad, Tuljapur, Latur, Ausa Drizzling Fri to Sat & tue to Thu Light Rain- Sun & Mon Pandharpur Drizzling- Sat& Mon Light Rain - Fri,Sun, Tue, Wed, Thu Kasegaon Drizzling- Sat,Mon,Thu Light Rain - Thu, Fri,Sun, Tue,Wed Atpadi, Pangri Light Rain - Fri to Thu	Partly Cloudy	00-14	62-76	82-97

Location	Temperature (°C)		Possibility of Rain	Cloud Cover	Wind Speed	R H%	
	Min	Max		01044 00101	(Km/hr)	Min	Max
Sangli	22 - 23	27-32	Sangli <b>Drizzling-</b> Sat, Wed, Thu <b>Light</b>	Partly Cloudy	00-16	62-80	86-99
			Rain- Fri , Sun to Tue				
			Kavatha Mahankal Drizzling -Fri, Sat				
			to Thu				
			Palus <b>Drizzling-</b> Fri, Fri& Mon <b>Light</b>				
			Rain- Thu, Sat to Sun, Tue to Thu				
			Valva, Tasgaon Drizzling - Thu, Sat,				
			Mon, Wed Light Rain- Fri, Sun, Tue to				
			Thu				
			Miraj, Shirguppi, Kagvad, Arag				
			Drizzling -Wed,Thu Moderate Rain-				
			Fri to Tue				
			Shetfal, Palsi <b>Drizzling -</b> Sat & Mon				
			Light Rain- Fri & Sun, Tue To Thu				
			Khanapur, Shirol <b>Drizzling</b> – Sun				
			Light Rain- Fri , Mon To Thu				
			Moderate Rain- Sat				
			Vite <b>Light Rain-</b> Thu to Thu				
Bijapur	22-23	30-32	Bijapur, Tikota, Chadchan <b>Light Rain</b>	Partly Cloudy	00-18	61-77	82-98
			Thu To Thu				
			Telsang <b>Drizzling</b> - Fri, Tue to Thu				
			Light Rain Sat to Mon				
Hyderabad	23	29-31	Hyderabad Zahirabad, Medchal –	Partly Cloudy	00-14	66-74	98- 100
			Drizzling Mon & Wed				
			Light Rain Fri To sun , Tue				

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: 144 days.

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

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

Pan evaporation: 4-6 mm

#### Water management

- 1. All the grape growing regions are forecasted to receive from drizzle to light rains. Generally, under wapsa (field capacity) condition of the soil, do not 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 4000 litre/acre/day in case no rains are received. Observe the vine growth before irrigation water application.

#### **Nutrient management**

- 1. Look for the sodicity problems. Soil, petiole and water reports will give information on extent of build up of sodicity in soil. Apply gypsum to the soil for removal of sodium from the soil exchange complex. In case of calcareous soils, use sulphur for similar purpose. Gypsum/sulphur should be properly mixed in soil. The soil should be moist. After approx. 20 days adequate should be provided to leach sodium from the soil.
- 2. If soils are calcareous in nature, then apply 50 kg sulphur between the vines in the soil. The sulphur should be properly mixed in the soil for improving its efficacy in taking care of calcium carbonates. The efficacy of sulphur is improved if FYM/ Compost are applied along with sulphur and mixed in the soil.
- **3.** If fruit pruning is scheduled in next 15-20 days, test your field soil and irrigation water and plan nutrient management accordingly.
- 4. In case pruning is scheduled during October, green manuring with Sunnhemp / Dhaincha is advised. In sodic soils, dhaincha is preferred.
- 5. Remove mulch applied during Foundation pruning and loosen the soil for improving movement of water through the root zone to reduce salts accumulated in the root zone. Organic mulch can be mixed in the soil to improve the porosity of the soil.
- 6. Apply FYM/ other organic sources including green manuring atleast 12-15 days before pruning. If possible mix 200 kg Single super phosphate in the FYM and apply in the soil. Application of organics improves the nutrient and water retention in the root zone and reduces nutrient losses from the profile.

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

Nil.

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

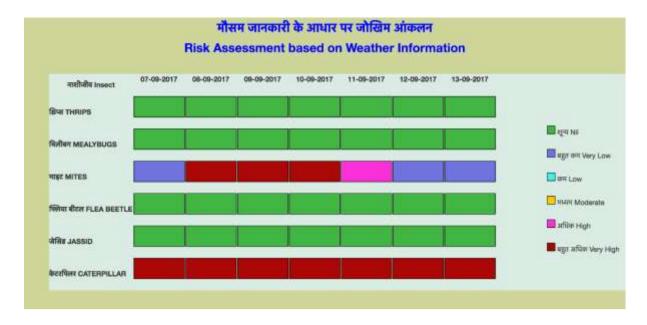
Nil.

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

Days after	Risk of diseases						
pruning	Downy mildew	Powdery mildew   Anthracnos		Others (specify)			
144	Moderate	Moderate	Low	Low Bacterial leaf spot			

As rains are predicted in all grape growing areas, it is advised to hold on to all pruning operations till the month end. At pre-pruning stage (before 7-8days) soil drench and foliar spray of *Trichoderma* sp and/or *Bacillus* sp may be given. If pruning is done already application of CAA fungicides at this stage viz. Dimethomorph@1g/L+mancozeb 75WP@2g/L or Iprovalicarb+propineb @ 2.25g/L or Mandipropamid@ 0.8g/L or Dimethomorph +ametoctradin@0.8g/L or Cymoxanil +Mancozeb WP@2g/L may be done for controlling downy mildew. In some areas rust incidence is reported and application of 1% Bordeaux mixture should be done to control it. If the incidence is high application of hexaconazole@1ml/L or tetraconazole@0.75ml/L or difenoconazole@0.5ml/L may be done

## 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.