मौसम पूर्वानुमान आधारित साप्ताहिक सलाह
Weather Forecast Based Weekly Advisory

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

I. Weather Data for the Prevailing Week

Thursday (14/07/2016) - Thursday (21/07/2016)

Location	Temperature		Possibility of Rain	Cloud Cover	Wind Speed (Km/hr)	R H%	
	Min	Max				Min	M
Nashik	21-22	26-28	**Sun-Wed Light Rain** Nashik, Pimpalgaon, Ojhar,Niphad, Dindori, Vani, Palkhed, Shirdi,Loni, Rahata **Thu-Thu Full week Drizzling** Kalwan, Devla, Satana,Chandwad, Lasalgaon, Yeola	Cloudy	06-21	71-77	92-1
Pune	21-22	27-29	**Thu-Thu Light Rain** Pune, Phursungi, Narayangaon, Junnar **Sun Light Rain** Loni Kalbhor, Uruli Kanchan, Yavat, Rahu. **Very Light or drizzling for full Week**	Cloudy	03-21	70-76	91-9
Solapur	21-23	31-33	**Sun-Mon, Thu Light Rain** Vairag, Barshi, Pangri, Kari **Thu Light Rain** Tuljapur, Osmanabad, **Sun, Thu Light Rain** Latur, Ausa **Sun- Mon Light Rain** Kasegaon	Cloudy	10-18	54-60	88-9
Sangli	21	27-28	**Sun-Mon, Wed-Thu Light Rain** Sangli, Miraj, Shirguppi, Arag, Bedag,Kagwad, Shirol. **Next Thu Light Rain** Khanapur, **Drizzling in Other areas**	Cloudy	10-23	65-71	89-
Bijapur	21	28-30	**Light Rain** **Mon** Bijapur**,** **Sun- Mon** Chadchan	Mostly Cloudy	14-24	55-63	90-
Hyderabad	21-22	27-28	**Light Rain** **Mon- Thu** Zahirabad **Tue-Thu** Medchal, Rainlaguda **Wed- Thu** Hyderabad	Cloudy	06-23	62-72	90-

II. a) Days after pruning:

b) Expected growth stage of the crop

65-90days-Cane maturity stage

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

Expected pan evaporation: 0-4 mm

All recommendations are per acre/hectare basis.

Amount of irrigation advised:

Presently the vines are at Cane maturity and Fruit Development stage. 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 @ 5,600 litre/ha/day.

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

Through fertigation:

1. Potassium needs to be applied through drip during this stage.
2. 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.
3. 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.
4. 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 ensuing week.

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

Since only clouds are predicted during the period there will be only vegetative growth. This will delay the cane maturity. Excess canopy will also lead to disease incidence. Hence the shoot tipping may be given priority.

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

In continuous cloudy situations which is accompanied by light drizzling, incidence of powdery mildew is likely and it can be controlled by a spray of 80WG sulphur @ 1.5 – 2.0 g/L. In areas where there was an application of copper based fungicides (Bordeaux mixture 0.5% or copper hydroxide 1.5 g/L or copper oxychloride 3.0 g/L) prior to rainfall in the previous week, repeat application of the same may be done. Tank mix of sulphur and copper based fungicides at their aforementioned doses in the above situation will mitigate both powdery and downy mildew. In all the cases mentioned above, follow-up application of chitosan 10% @ 2ml/L should be done for better efficacy of the fungicides.

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

Risk levels of different insects

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

As relative humidity will remain high in most of the grape growing areas, the caterpillar infestation may increase. Eemamectin benzoate 5 SG @ 0.22 g/liter or fipronil 80 WG @ 0.06 g/liter water can be given for the management of caterpillars.

During current spell of rainfall, chafer beetle infestation may also be observed. Border vines or vines in proximity of trees should be critically observed as these vines experience higher damage due to chafer beetle. If high damage to leaves is observed, fipronil 80 WG @ 0.06 g/liter water may be used.

Excess shoot growth may help to build up thrips population and reduce coverage during insecticide applications, therefore, excess shoot growth should be removed. Emamectin benzoate and fipronil are also effective against thrips.

Buprofezin 25 SC @ 1.25 ml/liter water can be used for the control of mealybugs. As relative humidity is increasing, application of entomogenous fungi, e.g., *Lecanicillium lecanii* or *Beauveria bassiana* or *Metarhizium anisopliae* as preventive plant wash at fortnight intervals can be useful to reduce mealybug populations.

For the management of mites, sulphur 80 WDG @ 2.0 g/L water is effective.

Pre harvest interval (PHI) mentioned in the Annexure V of the Residue Monitoring Plan (RMP) should be adhered to.

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.