मौसम पूर्वानुमान आधारित साप्ताहिक सलाह
Weather Forecast Based Weekly Advisory

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

I. Weather Data for the Prevailing Week

Thursday (30/06/2016) - Thursday (07/07/2016)

Location	Temperature		Possibility of Rain	Cloud Cover	Wind Speed (Km/hr)	R H%	
	Min	Max				Min	Max
Nashik	22-23	25-28	**Sun-Wed** Nashik, Niphad,Devla, Satana,Pimpalgaon,,Palkhed,Dindori,, Shirdi,Kalwan,Loni	Cloudy	10-31	76-80	93-100
Pune	21-22	26-27	**Sat-Tue** Pune, Phursungi Loni Kalbhor,Uruli Kanchan, Yavat,Patas,Supa,Baramati, Narayangaon,Junnar	Cloudy	11-27	75-87	89-100
Solapur	22-23	27-30	**Tue-Fri** Osmanabad, **Thurs-Fri** Latur,Ausa **Sat and Mon** light rain **Tue-Fri** Osmanabad **,** Latur,Ausa,	Cloudy to overcast	11-31	67-83	88-92
Sangli	21-22	24-26	**Fri- Wed** Sangli,Palus,Valva,Tasgaon,Miraj, Shirguppi,Arag,Kavate Mahankal,Shetfal, Palsi,	Cloudy	18-28	78-88	93-100
Bjiapur	21-22	25-27	**Tue-Thurs** Bijapur,Tikota,Telsang,	Partly Cloudy	21-33	69-74	93-94
Hyderabad	22-23	27-33	**Fri-Sat,Tue-Wed,** Hyderabad, Zahirabad, Medchal	Partly Cloudy	12-31	69-73	82-88

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: 3-6 mm

All recommendations are per acre/hectare basis.

Amount of irrigation advised:

1. In case of April pruned vineyards, the vines are at Cane maturity and Fruit Development stage. Provide irrigation through drip @ 4200 – 8,400 litre/ha/day.
2. In case of Late pruned vineyards (May), the vines are in Cane maturity and Fruit Development stage. Provide irrigation through drip @ 4200 – 8,400 litre/ha/day. Any deficit during this stage could reduce the vine yield by 8- 10% during Fruit pruning season.
3. In case rain exceeds 5 mm on a given day, irrigation water application can be skipped for that day. **As a thumb rule, do not irrigate the vines if the soil moisture is at field capacity (wapsa condition).**

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

Through fertigation:

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 atleast six doses to reduce the leaching losses of the potassium.
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 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.
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. Hence the shoot tipping may be given priority.

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

In places where light to moderate rains have occurred and there is a temperature drop, downy mildew can be effectively controlled by application of potassium salt of phosphorous acid 2-3 g/L + mancozeb 2.0 g/L as tank mix. If the rain spell continues application may be repeated at 5-6 days interval, when the rain has stopped. In areas wherein shoot growth has been stopped and continuous rains are likely, for the control of downy mildew copper based fungicides can be preferred (Bordeaux mixture 0.5% or copper hydroxide 1.5 g/L or copper oxychloride 3.0 g/L). In a situation where cloudy days are continuous and most of the time drizzling was observed, incidence of powdery mildew is likely. Powdery mildew can be controlled by spray of 80WG sulfer @ 1.5 – 2.0 g/L.

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 increase in most of the grape growing areas, the caterpillar infestation may occur. Emamectin 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 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.