## मौसम पूर्वानुमान आधारित साप्ताहिक सलाह Weather Forecast Based Weekly Advisory

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

## I. Weather data for the prevailing week

16/06/2016-23/06/2016

Location Temperature		erature	Possibility of Rain	Cloud	Wind	R H%	
	Min	Max		Cover	Speed	Min	
					(km/hr)	Max	
Nashik	22-	30-	Sun- Fri Niphad, Devla, Satana,	Partly	05-20	44-60	
	23	33	Pimpalgaon, Chandwad, Lasalgaon,	cloudy		88-94	
			Yevla, Shirdi, Loni,Rahata				
Pune	22-	31-	Mon- Tue Yavat,	Partly	08-21	58-60	
	23	32	Baramati,Patas,Pargaon	cloudy		90-93	
			Sat- Narayangaon,Junnar				
Solapur	23-	30-	Mon-	cloudy	00-22	29-53	
	25	35	Nanaj,Kati,Kem,Vairag,Barshi			85-100	
			Sunday Onward-				
			Osmanabad, Tuljapur				
			Sun-Wed Latur, Ausa				
Sangli	22	28-	Mon-Sat	cloudy	10-23	59-62	
		30	Kavate mahankal,Palsi,			89-93	
			Vita,Tasgaon				
			Mon- valva,				
Bjiapur	21-	27-	Sat-Sun, Thu-Fri Telsang, Tikota	cloudy	14-24	48-59	
	22	33				93-98	
Hyderabad	23-	29-	Sat-Mon, Thu-Fri Metchal,	cloudy	06-21	44-58	
	24	36	Zahirabad,			80-97	
3.6 1 (0.1) 1 0, 77							

Major change if likely after 7days

## II. a) Days after pruning:

#### b) Expected growth stage of the crop

45-65 days-Fruit differentiation – Subcane development

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

**Expected pan evaporation:** 5-8 mm **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 @ 7000 11,200 litre/ha/day.
- 2. In case of Late pruned vineyards (May), the vines are either in Fruit bud differentiation stage. Provide irrigation through drip @ 7000 11,200 litre/ha/day at Fruit bud differentiation in case no rains are received. 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. In case of April pruned vineyards, 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 May pruned vineyards, Phosphorus application should be made during Fruit Bud differentiation stage for proper bud differentiation. Approx. 34 kg phosphoric acid (85%  $P_2O_5$ ) should be applied.
- 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 atleast 3 doses of 5kg each.
  - Through direct application:
  - Any specific step in relation to weather (rainfall)

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

At 60 days after foundation pruning uracil may be given @ 50 ppm as a second application. No other growth regulator is required to apply at this stage.

# **VI.** Specific recommendation for canopy management (Dr. R.G. Somkuwar)

- 1. Existing vines: The vines pruned during  $10^{th}$  to  $15^{th}$  April must be in the end of fruit bud differentiation. Hence, the care to be taken to advance the cane maturity. Do not allow the shoot to grow. Shoot pinching will require at this stage.
- 2. New vines: Extension of cordon for development of few more shoots will help to develop strong trunk and cordon.

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

Sangli region faces the threat of downy mildew and application of potassium salt of phosphoric acid@3 g/L should be done on/before Friday. In Latur, Osmanabad and Sholapur region, bacterial spot and anthracnose might be predominant and to control them application of Thiophenate methyl 70WP @ 1g/L+Mancozeb@2.5g/L should be done prior to downy mildew management as stated above. In Nashik region there might be an occurrence of powdery mildew and application of Sulphur 80WG @ 2g/L is advised to be followed by copper based formulations like 0.5% Bordeaux mixture or copper hydroxide @ 1.5-2g/L or copper oxychloride@ 3g/L should be applied

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

#### Risk levels of different insects

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

If thrips population is high, emamectin benzoate 5 SG @ 0.22 g/liter or fipronil 80 WG @ 0.06 g/liter water can be given. Emamectin benzoate and fipronil are also effective against caterpillars.

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) must be adhered to.

विशेषज्ञों द्वारा अलग-अलग स्थानों के लिए प्रासंगिक फसल सलाह को पूर्वानुमानित मौसम, फसल विकास के चरणों की अंगूर के ज़्यादातर बागों में अवस्था और प्रगतिशील अंगूर उत्पादकों के साथ नियमित बातचीत से प्राप्त जमीन जानकारी के आधार पर तैयार किया जाता है। इसके सही होने का कोई दावा नहीं किया जा रहा है।

इस जानकारी की उपयोगिता director.nrcg@icar.gov.in पर हमें सूचित की जा सकती है।

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.