# मौसम पूर्वानुमान आधारित साप्ताहिक सलाह Weather Forecast Based Weekly Advisory

ई-फाईल सं. राअंअनुकें/साप्ताहिक सलाह/2015-16/28 जुलाई-04 अगस्त 2015 E-File No. NRCG/Weekly advisory/2015-16/28 July-04 Aug 2015 दिनांक 28.07.2015 Date 28.07.2015

# विषय-सूची Contents

1. मौसम संभावना Likely weather (सामयिकीकरण Update: साप्ताहिक Weekly): 28.07.2015 -12.08.2015

2. साप्ताहिक अंगूर सलाह Weekly grape advisory: 28.07.2015 -04.08.2015

2.1 लता प्रबंधन Canopy management

2.2 पौषक तत्व एवं जल प्रबंधन Nutrient and water management

2.3 पादप वृद्धि नियामक प्रबंधन Plant growth regulator management

2.4 रोग प्रबंधन Disease management

2.5 कीट प्रबंधन Insect pest management

## 1. मौसम संभावना Likely weather: 28.07.2015 -12.08.2015

प्राचल Parameter	सटाणा Satana आंशिक बादल से	नासिक क्षेत्र Nasik area आंशिक बादल से	सांगली क्षेत्र Sangli area आंशिक बादल से	Solapur area	पुणे क्षेत्र Pune area आंशिक बादल	बीजापुर Bijapur आंशिक बादल से	रंगारेड्डी (हेदराबाद) Rangareddy (Hyderabad)		अनंतपुर Anantapur
बादल आच्छादन Cloud cover				आंशिक बादल से पूरा बादलों				Billराक बादल Partly cloudy	
Cioud Covei	पूरा बादलों से घिरा	~		से घिरा हुआ Partly cloudy to Overcast	से पूरा बादलों से	~		raitly cloudy	raitly cloudy
	हुआ Partly cloudy to Overcast	3	हुआ Partly cloudy to Overcast	raitly cloudy to overcast	Partly cloudy	Partly cloudy to	से घिरा हुआ Partly cloudy to Overcast		
वर्षा	सटाणाः	नासिक, निफाड	सांगली, मिरज,	सोलापुर, नाणज,	पुणे, फुरसुंगी,	बिजापुर, तिकोटा,	हैद्राबाद,	मंदसौर:	अनंतपुर:
Rainfall	बूंदा-बांदी	पिंपलगाव-बसवंत,	शिरगुप्पी,	आटपाड़ी, पंढरपुर, काटी:		चडचण, तेलसंग:	मेडचल,	बूंदा-बांदी	बूंदा-बांदी
	बुध (29/07) -	ओझर, पालखेड़,	कागवंड, अरगः	बूंदा-बांदी	नारायणगाव:	बूंदा-बांदी	झाहिराबाद:	शुक्र (31/07)	बूंदा-बांदी
	रवि (02/08)।	दिंडोरी, वनी:	बूंदा-बांदी	मंगल (28/07) -	हल्की बारिश	मंगल (28/07) -	बूंदा-बांदी	-	<b>मंग</b> ल
	हल्की बारिश	बूंदा-बांदी	मंगल (28/07) -	रवि (09/08)।	मंगल (28/07)	रवि (02/08)।	मंगल (28/07)	सोम (03/08)।	(28/07) -
	मंगल (28/07),	रवि (02/08) -	रवि (02/08)।	हल्की बारिश	-	हल्की बारिश	_	हल्की बारिश	बुध (12/08)।
	सोम (03/08) -	गुरु (06/08)।	हल्की बारिश	सोम (10/08) -	बुध (12/08)।	सोम (03/08) -	शनि (01/08)।		Anantapur:
	बुध (12/08)।	हल्की बारिश	सोम (03/08) -	बुध (12/08)।		बुध (12/08)।	हल्की बारिश		<b>Drizzling</b> Tue(28/07)-
	Satana:	मंगल (28/07) -	मंगल (11/03)।			Bijapur,	रवि (02/08) -		Wed(12/08).
	<b>Drizzling</b> Wed(29/07)-	शनि (01/08),		कासेगाव, लातूर, तुलजापुर,	,	Tikota, Telsang,	3 ` '	मंगल (04/08)	
	Sun(02/08).	KISI (07/00) -	3	औसा, उस्मानाबाद, वैराग,	यवत, पाटस,	Chadchan:	Hyderabad,	_	
	<b>Light rain</b> Tue(28/07),	99 (12/00)1	<b>3</b> .	पांगरी, बार्सी: 	9	<b>Drizzling</b> Tue(28/07)-	Medchal, Zahirabad:	बुध (12/08)।	
	Mon(03/08)-		पलसी, शेटफल,	बूंदा-बांदी	नूपा-बावा	Sun(02/08).	Drizzling	Mandsaur:	
	Wed(12/08).		कवठे- महंकाळ:	मंगल (28/07) <i>-</i>		Light rain		<b>Drizzling</b> Fri(31/07)-	
			बूंदा-बांदी	रवि (02/08),		Mon(03/08)- Wed(12/08).	Light rain	Mon(03/08).	
		"		गुरु (06/08) -	राजि (00/00)।		0 (0 = , 0 0 )	Light rain Tue(28/07)-	
		` ,	रवि (09/08)।	बुध (12/08)।	हल्की बारिश		Wed(12/08).	Thu(30/07),	
		<i>3</i> ` ′	हल्की बारिश	हल्की बारिश	रवि (09/08)-			Tue(04/08)-	
		Nasik, Niphad, Pimpalgoan-		सोम (03/08) -	बुध (12/08)। <b>Pune,</b>			Wed(12/08).	
		Baswant, Ojhar, Palkhed, Dindori, Vani:	Shirguppi, Kagvad, Arag:	मंगल (05/08)। Solapur, Nanaj, Pandharpur, Kati, Atpadi:	Phursungi, Junnar, Narayangaon				
			<b>Drizzling</b> Tue(28/07)-	<b>Drizzling</b> Tue(28/07)-	Light rain				

		Thu(06/08). <b>Light rain</b> Tue(28/07)- Sat(01/08), Fri(07/08)- Wed(12/08). <b>Shirdi, Loni,</b>	Light rain Mon(03/08)- Wed(12/08). Palus, Valva, Tasgoan, Vite,	Sun(09/08). Light rain Mon(10/08)- Wed(12/08).  Kasegaon, Osmanabad, Tuljapur, Latur, Ausa, Vairag, Pangri, Barsi:	Tue(28/07)- Wed(12/08). Lonikalbhor, Urulikanchan , Yavat, Supa, Patas,				
		Kalwan, Devla: Drizzling Tue(28/07)- Wed(12/08).	Shetfal, Palsi, Kavthe- Mahankal: Drizzling Tue(28/07)- Sun(09/08). Light rain	<b>Drizzling</b> Tue(28/07)- Sun(02/08),	Baramati: Drizzling Tue(28/07)- Sat(08/08). Light rain Sun(09/08)- Wed(12/08).				
तापमान Temp (°C ) न्यून. Min. अधिक. Max.	21-22 23-28	21 24-28		22-23 29-35					22-23 26-29
सा.आर्द्रता RH (%) अधिक. Max	84-87 67-79	84-87 67-79		70-74 49-51					76-79 42-46
न्यून. Min. पवन(किमी/घंटा) Wind (km/hr)	14-31	3-23	13-31	5-34	4-26	16-39	16-37	6-27	5-24

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.

# 2. साप्ताहिक अंगूर सलाह Weekly grape advisory: 28.07.2015 -04.08.2015

## 2.1 लता प्रबंधन Canopy management

**Timely pruned vineyard**: Based on the weather prediction of light rains, drizzling during this period, the build-up of relative humidity in the atmosphere will be experienced. This will result into increase in the humidity in canopy. Hence, this condition will support to activate the inoculum of downy mildew and also anthracnose to some extent. The farmers are advised to control shoot vigour by shoot pinching and potash application either through drip or spray. Training of shoots on foliage wire will help to reduce the humidity in canopy thereby reducing the downy mildew incidence.

**Late pruned vineyard**: Due to light rains, there will be enough moisture in soil as well as more humidity in the atmosphere. This will help to increase shoot growth thereby delaying the cane maturity. Under such gardens, the shoot pinching, application of potassic fertilizers to the vine either through drip or spray, training the shoots on wire so as to make available open canopy should be given priority.

**Rootstock planted gardens**: The selected shoots trained to the bamboo should be allowed to grow straight. Removal of side shoots in 2-3 instalments at 15 days interval will help to obtain straight shoot with 8-10mm diameter at one feet height above the ground. Application of 18:46:0 will help to obtain shoots with proper nutrition required for graft success.

## 2.2 पौषक तत्व एवं जल प्रबंधन Nutrient and water management

In case of both April and May pruned vineyards, the vines are at Cane maturity and Fruit Development stage. Provide irrigation through drip @ 8400 litre/ha/day in case no rains are received. Any deficit during this stage could reduce the vine yield by 8- 10% during Fruit pruning season. 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).

Wherever the soil has developed sodicity problems and the same is being shown on the leaves as leaf blackening sysmptoms, apply gypsum as amendment between the vines and spread it uniformly on the vine rows. In case of calcareous soils, use sulphur instead of gypsum. See that the row is moist for the chemical action of gypsum/ sulphur. These amendments should be mixed in soil atleast upto 15cm depth or more. After 20-25 days, open furrows in the row and add excess water to leach out the salts from the row.

Raise Sunhemp or Dhaincha within the rows and between the rows and after 40-50 days when succulent incorporate in the soil for improving soil organic matter after 45-50 days. Potassium application is required from Cane maturity stage onwards, otherwise late season potassium deficiency will lead to reduced fruitfulness.

## 2.3 पादप वृद्धि नियामक प्रबंधन Plant growth regulator management

## Consequences of formation aerial roots on the cordons of grape vine during rainy season

In coming days rain will be received in the all grape growing regions of Maharashtra state. Due to heavy rains water logging in vineyards will be the emerging problem. Water logging in vineyard result into delay to vineyards to come to field capacity for prolong period which causes disturbances in root aeration as well as

uptake of nutrients and hence vine forms aerial roots. Poor drainage was observed in heavy soils, such soils majority observed in Nashik region. Hence, in this region during rainy season growth of aerial roots on vine observed in every year. New roots cannot develop in such condition. Aerial roots helps vine to survive in high rainfall areas because water logging in soil which disturbs the physiological processes of vine. Growth of aerial roots depends on variety, vineyard, location, own rooted or rootstock vineyard and environmental changes. Formation of aerial roots will results in reduction in nutrients and food materials to the vine and it will also delay the cane maturity.

#### Reasons:

Reasons behind growth aerial roots were exactly not known but it may be climate change and water logging. Plant growth regulators like auxins promotes root growth. Spraying of such PGR results in development of aerial roots.

#### Remedies over it:

- In rainy season, for proper drainage of water, prepare a trench between two rows of vine.
- Keep focuses on minimum occurrence of water logging in the vineyard.
- Due to application of fertilizers in root zone, salt concentration increases which reduce infiltration of water in soil. To reclaim salts from root zone proper management of water should be done.
- While preparing land for cultivation keep slope in one direction to drain out excess rain water from field.
- Due to intercultural operations like spraying, weeding soil comes under the wheels of tractors; and feet of labours such soil get compress and becomes hard. In such soil infiltration rate gets reduced. For good filtration and drainage of water, before rainy season loosening of soil should be carried out. Due to this proper infiltration is carried out.
- Organic matter content in soil increases water holding capacity of soil hence organic manure and green manure application in vineyard may be beneficial for drainage of water.

### **How to Avoid:**

- While conducting intercultural operations do not walk on trench.
- If possible, delay the weed management or avoid it.
- Minimum use of auxins or avoid auxins.

## 2.4 रोग प्रबंधन Disease management

For Nasik and Pune regions, a repeat spray of copper hydroxide @ 2g/L may be undertaken around Thursday or Friday for protection against downy mildew. If there are some regions where there is no rainfall, Sulphur 80WG @ 2g/L may be applied for powdery mildew control.

For Sangli region, similar spray of copper hydroxide @ 2g/L may be undertaken around Saturday or Sunday. An application of Sulphur 80WG @ 2g/L is to be repeated for continuing the protection against powdery mildew.

For Solapur and Bijapur regions, powdery mildew protection needs to be taken and hence application of Sulphur 80WDG like the previous locations are advised. As wind speed is high in Sangli, Solapur and Bijapur regions, spread of powdery mildew will be faster so protective measures needs to be implemented on time.

## 2.5 कीट प्रबंधन Insect pest management

वृद्धि अवस्था (बेक प्रनिंग के पश्चयात दिन) Growth	संभावित पीडक जन्तु जोखिम Likely Pest Risk						
Stage (Days after back pruning)	थ्रिप्स Thrips	माइट्स Mites	केट्रपीलर्स	मिलीबग्स	जेसीड्स		
Stage (Day's arter back pruning)		गाउँद्स ।नास्टंड	Caterpillar	Mealybug	Jassids		
	। मध्यम	कम से मध्यम	मध्यम से अधिक	मध्यम	कम से मध्यम		
>100	Moderate	Low to Moderate	Moderate to high	<b>Moderate</b>	Low to Moderate		

वातावरण एवं फसल की अवस्थाएँ थ्रिप्स, जेसिड और केड्रपीलर्स के विकास के लिए उपयुक्त होंगी। थ्रिप्स और केड्रपीलर्स के नियंत्रण के लिए एमामेक्टिन बेन्ज़ोएट 05 एस जी @ 0.22 ग्राम/लीटर, लेंबड़ा साइहेलोथ्रिन 5 CS @ 0.5 मिली/लीटर या फिप्रोनिल 80 WDG @ 0.06 ग्राम/लीटर का प्रयोग किया जा सकता है।

Both weather and crop conditions will become favourable for thrips, jassids and caterpillar development in vineyards. For the management of thrips and caterpillar, emamectin benzoate 05 SG @ 0.22 g/L, lambda cyhalothrin 5 CS @ 0.5 ml/L, or fipronil 80 WDG @ 0.06 g/L can be used.

### योगदानकर्ता Contributors:

- 1. नता प्रबंधन Canopy management: डॉ रा.गु. सोमकूवर Dr. R.G. Somkuwar
- 2. पोषक तत्व और जल प्रबंधन Nutrient and water management: डॉ अ.क्. उपाध्याय Dr. A.K. Upadhyay
- 3. पादप वृद्धि नियामक प्रबंधन Plant growth regulator management डॉ स.द. रामटेके Dr. S. D. Ramteke
- 4. रोग प्रबंधन Disease management: डॉ सं.दी. सावंत, डॉ स्जॉय साहा Dr. S.D. Sawant, Dr. Sujoy Saha
- 5. कीट प्रबंधन Insect pest management: डॉ दी.सिं. यादव Dr. D.S. Yadav
- 6. मौसम पूर्वानुमान Weather forecast: श्री प्रसाद सी नवले Mr. Prasad C. Navale

### संकलन Compilation:

1. डॉ दी.सिं. यादव Dr. D. S. Yadav

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 dirnrcg@gmail.com 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 <a href="mailto:dirnrcg@gmail.com">dirnrcg@gmail.com</a>.