WEATHER DATA FOR THE PREVAILING WEEK
Date of Fruit Pruning: 28/09/2020
Wednesday (24/2/2021)–Wednesday (03/03/2021)

Location	Temperature (°C)		Possibility of Rain	Cloud Cover	Wind Speed (Km/hr) Min-Max	RH%	
	Min	Max				Min	Max
Nashik	17-21	29-36	Nashik, Ozar, Palkhed, Dindori, Vani, Loni, Pimpalgaon Baswant, Niphad, Shirdi, Devla, Kalwan - No Rain.	Clear to Partly Cloudy	1-15	14-20	32-42
Pune	17-22	30-33	Pune, Phursungi, Loni Kalbhor, Uruli Kanchan, Patas, Baramati, Junnar, Yavat, Supa, Narayangaon - No Rain.	Clear	0-14	14-23	35-44
Solapur	19-22	34-37	Solapur, Vairag, Nannaj, Kati, Pangri, Osmanabad, Barshi, Kasegaon, Atpadi, Latur, Ausa, Tuljapur, Pandharpur - No Rain.	Clear	3-12	10-17	16-39
Sangli	19-21	33-37	Sangli, Kagvad, Shetfal, Palsi, Palus, Khanapur, Vita, Miraj, Tasgaon, Kawthe Mahakal, Walva, Shirguppi, Arag - No Rain.	Clear	1-14	12-26	29-56
Vijayapura	17-21	32-35	Vijayapura, Chadchan, Tikota, Telsang – No Rain.	Clear	3-17	11-22	18-38
Hyderabad	18-24	32-36	Hyderabad, Medchal, Zahirabad – No Rain.	Clear	1-10	13-19	21-51
Satara	17-19	32-36	Satara, Khatav, Phaltan, Man – No Rain.	Clear to Partly Cloudy	1-14	15-29	37-56
Ahmednagar	17-20	33-35	Ahmednagar, Nagar, Akole, Kopargaon, Rahata, Sangamner, Jamkhed, Karjat, Shrigonda – No Rain.	Clear to Partly Cloudy	3-16	12-17	27-36
Jalna	18-20	33-36	Jalna, Ambad, Gansawangi, Jafrabad, Mantha – No Rain.	Clear to Partly Cloudy	2-12	11-15	20-29
Buldhana	17-20	35-39	Buldana, Chikhli, D.raja, Sindkhedraja – No Rain.	Clear	0-15	13-16	20-32
Kolhapur	19-22	34-39	Gagan-bavada, Kagal, Karveer – No Rain.	Clear	1-14	17-29	58-68
Bengaluru Rural	16-21	30-32	Bangaluru-east, Bangaluru-north, Bangaluru-south, Doddaballapur, Anekal – No Rain.	Clear	1-19	18-27	33-72
Belagavi	17-21	32-36	Belagavi, Athni, Gokak, Chikodi, Khanapur – No Rain.	Clear to Partly Cloudy	2-17	15-29	51-69

Bidar	18-22	34-37	Bidar, Basavakalyan, Humnabad – No Rain.	Clear	2-12	12-15	20-44
Bagalkot	20-23	33-36	Bagalkot, Badami, Bilagi, Hungund, Jamkhandi, Mudhol – No Rain.	Clear	2-14	12-20	25-56

Note: Above weather information is summary of weather forecasting given in following websites

https://www.wunderground.com/?cm_ven=cgi

https://imdagrimet.gov.in/weatherdata/BlockWindow.php

https://www.accuweather.com/

ICAR-National Research Centre for Grapes does not claim accuracy of it.

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

a. **Days after fruit pruning: 149**
b. Expected pan evaporation: 5 to 8 mm

1. In case the soil is under wapsa (field capacity) condition, donot irrigate the vineyard.
2. From Veraison stage onwards till maturity, apply irrigation through drip @ 8,500 – 10,200 L/ acre/ day. In the area where max. temperature exceeds 37°C, apply irrigation ranging from 11,900 to 13,600.
3. In case vigour is more than desired, then reduce irrigation water application by half to 4,250 – 7,000 L/ acre. Still if you are not able to control the vigour, stop irrigation till such time growth is controlled.
4. Practice mulching to keep the bunds moistened. This will reduce the salinity build up in the root zone due to evaporation of the moisture from the surface of the bund.
5. Flooding should be avoided.
6. Whereever temperature is crossing 35°C, donot withhold water during ripening to harvest stage as this will lead to loose bunch, thereby affecting the quality of produce. This is especially true in case of light soils and Saline soils.

Soil and Nutrient management
Ripening to Harvest stage:

1. Apply Sulphate of potash or 0-0-50 @ 25 kg/ acre in 3-4 splits for next two weeks. Total potassium application (SOP) should be approx. 60 kg/acre during this stage. Follow this up with Magnesium sulphate @ 10 kg/acre in two splits.
2. Spray Magnesium sulphate and potassium sulphate @ 3g/L in calcareous soil.

Rest period:

1. Apply 10kg Urea, 10 kg DAP and 10 kg Sulphate of Potash/ acre in two splits every 15-20 days.

Foundation pruning:

1. If planning for foundation pruning in next 10- 15 days, it is advised to get soil and water analysed for planning nutrient and water application schedule for foundation pruning season.

III. Requirement of growth regulators (Dr. S.D. Ramteke)

Nil

IV. Canopy management (Dr. R.G. Somkuwar)

Canopy management practices

At present the temperature in major grape growing areas is increasing. During the stage of grape harvest, the growers are facing some problems. In the following article, the measures for correcting the defects and also the practices to be followed during this week is as follows

Management in old vineyard:

1) During the time of harvest, bunches shows the symptoms of cluster drying. The cluster starts drying from the tip. This is also called necrosis (Sukwa). This condition is seen when the irrigation water requirement and the availability to the vine becomes imbalance. In addition, the bunch load also an important factor which may disturb the balance between source and sink. The possibility of disease incidence during the pre-bloom to flowering stage cannot be avoided. Under such situation, the growers are advised to irrigate the vineyard with field capacity. Do not withhold the irrigation water 10-15 days before harvest. At this stage, the use of fungicide sprays are not advisable. Hence, the use of biologicals can be given top priority.

Re-cut in new vineyard:

The minimum temperature in the atmosphere is increasing. This condition is more favourable for physiological activities of vine. Hence, preparation for re-cut need to be done.

a) Water stress to the vine: Depending upon the soil type and stem diameter of grafted vine, the water stress given to the vine will help for easy and early bud sprout.
b) Trench opening: During this time, a trench of 2 feet wide and 2-3 inch depth will help to apply FYM and other fertilizers. This operation will lead to cutting of roots to about 15 to 20 %. However, the roots should not be removed than this.
c) During the first year, deficiency of ferrous is seen. Hence, soil test should be done on priority.
d) After the re-cut, apply hydrogen cyanamide @35- 40 ml per litre. Double application is not required.
e) During the stage of bud sprouting, flea beetle may be a problem. This pest eat the sprouting bud thereby leading to complete damage of bud. Spray of Imidachloprid17.8SL @ 0.4 ml/L or Lambda Cyahalothrin 4.9 CS @ 0.5 ml/L water can be done during evening time since the pest is active during this time.

V. Disease management (Dr. Sujoy Saha)

Days after fruit pruning	Risk of diseases			
149	**Downy mildew**	**Powdery mildew**	**Anthracnose**	**Others (specify)**
	Nil	Low	Nil	Nil

As harvesting is going on, it is advised to keep the fields clean so that inoculum is not carried over to the next season. Application of Ampelomyces quisqualis @ 6-8g/L should be done to control powdery mildew, if there is any. One spray of Bacillus subtilis @2g/L may be given to remove the pesticide residues from the berries. At this stage it is not advisable to spray any chemical as the crop is in harvesting stage.

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

Growth Stage: Berry development and veraison stage after October pruning

- Buprofezin 25 SC @ 1.25 ml/L (PHI 65 days) water or spirotetramat 15.31 OD @ 700 ml/hectare (PHI 60 days) may be used for the management of mealybugs. In case PHI cannot be maintained for application of insecticides, tag mealybug infested vines and wash with any trisiloxane polyether-based surfactant @ 0.3 ml per litre water with water volume 10-12 litres per vine with single gun at high pressure to wash off the mealybugs. It should be followed by washing with plain water.
- Mite infestation may increase in most of the grape areas. Sulphur 80 WDG @ 1.5-2.0 g/L or Abamectin 1.9 EC @ 0.75 ml/L (PHI 30 days) or Bifenazate 22.6 SC @ 0.5 ml/L (PHI 30 days) water may be applied if mite infestation is observed.
- All the cracked/damaged berries should be removed from the grape bunches. These berries should be destroyed by burying them minimum two feet deep in the ground away from the vineyards. It will reduce the scavenging fly population in the vineyard. Ripe banana can act as a good attractant for these scavenging flies. Therefore, banana traps can be made and installed at the rate 5 per acre. To make a banana trap, take a container with small holes at sides and put a fully ripe banana inside it cut into pieces. Pour 2-3 drops of spinosad 45 SC on the banana. Cover the mouth of the container with inverted paper-cone keeping a small hole at the bottom for fruit flies to enter. The berry cracking of grapes should be managed by following suitable viticultural practices.

24 फरवरी-03 मार्च, 2021

वृद्धि अवस्था: अक्टूबर प्रूनिंग के बाद बेरी विकास और वेराईजन अवस्था

• ब्यूप्रोफेज़िन 25 एससी @ 1.25 मिली / लीटर पानी (पीएचआई 65 दिन) या स्पाइरोटेट्रामैट 15.31 ओडी @ 700 मिली / हेक्टेयर (पीएचआई 60 दिन) का उपयोग मिलीबग के प्रबंधन के लिए किया जा सकता है। यदि इन कीटनाशकों के प्रयोग के लिए पीएचआई को बनाए नहीं रखा जा सकता है, तो मिलीबग संक्रमित अंगूर के पौधों को टैग करें और किसी भी ट्राइसिलोक्सेन पॉलिथर-आधारित सर्फैक्टेंट @ 0.3 मिली प्रति लीटर पानी (पानी की मात्रा 10-12 लीटर प्रति पौधा) उच्च दबाव में सिंगल गन से धोएं। बाद में सादे पानी से भी धोएँ।
• अधिकांश अंगूर क्षेत्रों में माइट का संक्रमण बढ़ सकता है। माइट के नियंत्रण के लिए सल्फर 80 डब्ल्यूडीजी @ 1.5-2.0 ग्राम / लीटर या एबामेक्टिन 1.9 ईसी @ 0.75 मिली / लीटर (पीएचआई 30 दिन) या बाईफेनाजेट 22.6 एससी @ 0.5 मिली / लीटर (पीएचआई 30 दिन) पानी का प्रयोग किया जा सकता है ।
• सभी फटे / क्षतिग्रस्त मणियों को अंगूर के गुच्छों से निकाल देना चाहिए। इन मणियों को अंगूर के बगीचों से दूर जमीन में न्यूनतम दो फीट गहरा दफन करके नष्ट कर देना चाहिए। यह अंगूर के बगीचों में फल मक्खी की आबादी को कम करेगा। पका हुआ केला इन फल मक्खियों के लिए एक अच्छा आकर्षण का काम कर सकता है। इसलिए, केले के ट्रेप को 5 प्रति एकड़ की दर से लगाया जा सकता है। केले के ट्रेप को बनाने के लिए, साइड में छोटे छेदों के साथ एक कंटेनर लें और उसके अंदर पूरी तरह से पके हुए केले को टुकड़ों में काट लें। केले पर स्पिनोसैड 45 एससी की 2-3 बूंदें डालें। उल्टे कागज-शंकु के साथ कंटेनर के मुंह को कवर करें जिसमें फल मक्खियों के प्रवेश के लिए नीचे एक छोटा छेद रखें। अंगूरों की बेरी क्रैकिंग का प्रबंधन उपयुक्त प्रथाओं का पालन करके किया जाना चाहिए।