WEATHER DATA FOR THE PREVAILING WEEK

Date of Fruit Pruning: 28/09/2020

Wednesday (31/03/2021)–Wednesday (07/04/2021)

Location	Temperature (°C)		Possibility of Rain	Cloud Cover	Wind Speed (Km/hr) Min-Max	R H%	
	Min	Max				Min	Max
Nashik	16-18	36-38	Nashik, Ozar, Palkhed, Dindori, Vani, Loni, Pimpalgaon Baswant, Niphad, Shirdi, Devla, Kalwan - No Rain.	Clear	2-18	11-17	41-72
Pune	15-19	35-38	Pune, Phursungi, Loni Kalbhor, Uruli Kanchan, Patas, Yavat, Supa, Narayangaon, Junnar, Baramati – No Rain.	Clear	2-19	8-15	42-63
Solapur	19-22	39-41	Solapur, Vairag, Nannaj, Kati, Pangri, Osmanabad, Kasegaon, Atpadi, Latur, Ausa, Tuljapur, Barshi, Pandharpur – No Rain.	Clear	5-18	3-9	14-40
Sangli	19-24	36-38	Sangli, Kagvad, Shetfal, Palsi, Palus, Khanapur, Vita, Miraj, Tasgaon, Kawthe Mahakal, Shirguppi, Arag, Walva – No Rain.	Clear	3-21	5-11	44-59
Vijayapura	20-23	39-41	Vijayapura, Chadchan, Tikota, Telsang - No Rain.	Clear	4-20	5-8	25-38

Hyderabad	22-25	39-41	Hyderabad, Medchal, Zahirabad - No Rain.	Clear	2-13	5-8	12-76
Satara	17-22	33-37	Satara, Khatav, Phaltan, Man - No Rain.	Clear	1-18	7-16	45-66
Ahmednagar	18-20	37-39	Ahmednagar, Nagar, Akole, Jamkhed, Karjat, Kopargaon, Rahata, Sangamner, Shrigonda -No Rain.	Clear	3-19	7-9	26-45
Jalna	20-22	38-39	Jalna, Jafrabad, Mantha, Ambad, Gansawangi - No Rain.	Clear	4-15	6-7	21-35
Buldhana	19-21	38-40	Buldana, Chikhli, D.raja, Sindkhedraja – No Rain.	Clear	4-17	4-9	24-40
Kolhapur	21-23	31-35	Gagan-bavada, Kagal, Karveer - No Rain.	Clear	2-20	18-30	81-94
Bengaluru Rural	20-23	35-36	Bangaluru-east, Bangaluru-north, Bangaluru-south, Doddaballapur, Anekal – No Rain.	Clear to partly cloudy	4-17	11-18	56-70
Belagavi	20-23	33-37	Belagavi, Athni, Khanapur, Chikodi, Gokak – No Rain.	Clear	1-21	6-19	58-72
Bidar	20-22	38-40	Bidar, Basavakalyan, Humnabad - No Rain.	Clear	3-15	4-7	8-33
Bagalkot	20-24	37-38	Bagalkot, Badami, Bilagi, Hungund, Jamkhandi, Mudhol - No Rain.	Clear	4-18	6-10	35-49

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: 184**

b) **Pan evaporation**: **7.5 to 9 mm**

1. During rest period, provide only need based irrigation to protect the existing leaves from drying and also it contribute towards increasing the reserves of the vines through photosynthetic activity. The quantum of irrigation water applied should be approx. 6000 – 6500 L/ acre, once in a week. Care should be taken to reduce/stop the water in case new growth is observed on the shoot.
2. After foundation pruning, during shoot growth stage, apply 12,750 – 15,300 L/acre per day of irrigation water.
3. In case vigour is more than desired, then reduce irrigation water application by half to 6,400 – 7,500 L/ acre. Still if you are not able to control the vigour, stop irrigation till such time growth is controlled.
4. **Cover the cordons of the pruned vines with shadenet**, if available, for uniform sprouting as well as reducing the irrigation water needs by 20-25 %. Shadenet coverage will reduce the temperature impact on the cordons. However, remove shadenet after 3-5 leaf stage. If shadenet is not available, spray the cordons with water during the peak heat period i.e. 2-3 pm to reduce the heat effect on the buds.

5. In case there is **probability of less irrigation water availability**, then flood the bund (not whole vineyard) at pruning and mulch the bunds. Flooding the bund will reduce the accumulated salt load in the root zone and mulching will reduce the evaporation of water from soil surface. Thus, this will reduce the salt load in the soil and at the same time saturate the soil leading to proper sprouting. Further, in case less irrigation water is available still the newly emerging shoots will not be damaged due to salinity.
6. In case the soil is under wapsa (field capacity) condition, donot irrigate the vineyard.
7. 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.
8. Flooding the vineyard is not advised as it will lead to wastage of water. Concentrate irrigation water application in the root zone only.

Soil and Nutrient management

1. During rest period, apply 10-15 kg urea, 25-30 kg SSP and 10-15 kg Sulphate of Potash per acre every 15-20 days till foundation pruning is not done.

Pre-pruning operations

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.
2. Apply 8-10 tons FYM/ acre atleast 15-20 days before pruning. In case soil is calcareous, apply Sulphur along with it.

3. If soils are calcareous in nature, then apply 50 kg sulphur between the vines in the soil. The sulphur should be properly mixed in the soil for improving its efficacy in taking care of calcium carbonates. Mixing of sulphur with FYM/ compost further improves its efficacy.
4. 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.
5. In case Single super phosphate needs to be applied as basal, then mix 200 kg Single super phosphate in the FYM and apply in the soil. This improves the phosphorus utilization by vines.
6. Never apply water soluble fertilisers like urea, ammonium sulphate etc. as basal, as they will leached and contaminate the ground water. They should be applied only from sprouting onwards.

Shoot growth stage

1. Apply 50 kg urea/ acre in 5-6 splits after sprouting. In calcareous soils, donot apply urea, instead use Ammonium sulphate @ 85 kg/acre in atleast 7-8 splits from sprouting onwards.
2. In case of vigorous growth of shoots, stop nitrogen application and wait for the growth to stabilize before resuming nitrogen application. If still the growth continues, then reduce irrigation. Then resume when growth is maintained at desired level.
3. Based upon soil test value, apply Zinc sulphate @10 kg/acre along with Ferrous sulphate @10kg/acre followed by Magnesium sulphate @15kg/acre in atleast 2 splits during 5-7 leaf stage. Boron application should be strictly based upon soil and petiole test.
4. In calcareous soils, spray magnesium sulphate and potassium sulphate @2 gm each/ L during active growing stage.

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

Nil

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

Following practices are advised during this period

1) During foundation pruning, trench opening to be given priority. During October pruning, trench opening will not be possible due to continuous rainfall and moisture in the soil.
2) The opened trench should not be exposed to sun for longer time. This may damage the cells of roots.
3) Farmyard manure need to be applied in sufficient quantity. This will help in aeration in the bund
4) Immediately after the application of FYM and other recommended nutrients, cover the trench with soil.
5) In case of shortage of irrigation water, irrigate the bund completely. This will help for formation of white roots.
6) Under high temperature, water spray twice in a day will help for early and uniform bud sprouts.
7) Bud sprouting will initiate after 12 to 14 days. This will depend upon the temperature of the vineyard and irrigation water available.
8) Shoot thinning to be done when the growth is at 6 to 7 leaf.
9) 0.5 shoot per square feet area to each vine should be maintained and remaining shoots to be removed.
10) While removing excess shoots, care should be taken that double and shoots going towards downward should be considered first. This will help for proper aeration in the developing canopy.
11) Sub cane development to be done when the shoot is 9 to 10 leaf stage. Pinching for sub cane be done at 7th leaf.

12) Under the conditions of reduced irrigation water, sub cane development should be avoided and straight cane be maintained. In this condition, shoot pinching be done at 10th to 11th leaf.

13) To achieve the vigor, nitrogen application along with irrigation is important.

V. Disease management (Dr. Sujoy Saha)

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

After harvest clean cultivation is to be maintained. Post application of FYM before pruning drip application of Trichoderma may be done.

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

Stage: Vine resting stage after harvest

- Spot plant wash with buprofezin 25 SC @ 1.25 ml per litre water with 1.5-2.0 litre water per plant to manage mealybugs after harvest.
- Sulphur 80 WDG @ 1.5-2.0 g/L or abamectin 1.9% EC @ 0.75 ml/L water may be applied if mite infestation is observed at vine resting stage after harvest.

चरण: फसल के बाद अंगूरलता आराम चरण

- कटाई के बाद मिलीबग का प्रबंधन करने के लिए बुप्रोफेजीन 25 एससी @ 1.25 मिलीलीटर प्रति लीटर पानी (1.5-2.0 लीटर पानी प्रति लता) के साथ स्पॉट प्लांट वॉश।
- यदि कटाई के बाद बेल विश्राम चरण में माइट का प्रकोप दिखाई देता है तो, सल्फर 80 डब्ल्यूडीजी @ 1.5-2.0 ग्राम / लीटर या एबामेक्टिन 1.9% ईसी @ 0.75 मिलीलीटर / लीटर पानी की दर से दिया जा सकता है।