

ICAR-NATIONAL RESEARCH CENTRE FOR GRAPES, Manjri, Pune.

WEATHER DATA FOR THE PREVAILING WEEK



Thursday (13/03/2025) – Wednesday (19/03/2025)

Location	Temperature (°C)			Cloud Cover	Wind Speed (Km/hr)	RH%
	Min	Max	Possibility of Rain		Min- Max	
Nashik	18-20	34-38	Nashik, Ozar, Kalwan, Pimpalgaon Baswant, Dindori, Palkhed, Loni, Vani – Thu – Wed – No Rain.	Clear to cloudy	14-18	14-22
Pune	20-22	37-39	Pune, Phursungi, Loni Kalbhor, Uruli Kanchan, Patas, Yavat, Narayangaon, Baramati, Indapur – Thu – Wed – No Rain.	Clear to cloudy	10-15	15-19
Solapur	23-25	38-40	Tuljapur, Ausa, Vairag, Barshi, Solapur, Pandharpur, Nannaj, Latur – Thu – Wed – No Rain.	Clear to cloudy	6-18	15-19
Sangle	भार ₁₈₋₂₄ A	तीय नृ 18 ₃₈₋₄₀ t	Sangli, Miraj – Sat – Drizzling Rain. Walva, Palus, Kawtha, Palsi, Shirguppi, Khanapur Vita, Shetphal – Thu – Wed – No Rain.	ाक्ष संशोधन वे Graçleø;tPun cloudy	ह्द, पुर्ण e ₃₋₁₄	16-19 ព រា រាថ្នាប់ NRCG
Vijayapura	21-26	37-40	Chadchan, Tikota, Telsang, Vijayapura – Thu–Wed –No Rain.	Clear to cloudy	8-16	15-18
Hyderabad	22-25	38-39	Hyderabad, Medchal, Zahirabad – Thu–Wed –No Rain.	Clear to cloudy	3-17	17-24
Satara	18-23	37-39	Satara, Khatav, Phaltan – Thu – Wed – No Rain.	Clear to cloudy	3-13	16-20
Ahmednagar	21-23	36-38	Sangamner, Rahata, Kopargaon Karjat, Ahmednagar, Shrigonda, Akole, Jamkhed – Thu – Wed – No Rain.	Clear to cloudy	6-13	15-19
Jalna	21-24	38-39	Ambad, Ghansavangi, Jafrabad, Mantha, Jalna – Thu – Wed – No Rain.	Clear to cloudy	4-16	13-18

Buldhana	21-23	35-38	D.raja, Sindkhed, Buldana, Chikhli –Thu–Wed –No Rain.	Clear to cloudy	7-23	13-20
Kolhapur	15-22	40-42	Kagal, Karveer, Gagan-bavada – Thu–Wed –No Rain.	Clear to cloudy	6-16	11-17
Bengaluru Rural	18-21	34-36	Anekal, Doddaballapur, Bengaluru -east, Bengaluru- north, Bengaluru – Thu–Wed – No Rain.	Clear to cloudy	12-21	10-18
Belagavi	18-21	36-38	Belagavi, Athni, Gokak–Thu– Wed –No Rain. Chikodi, – Sat – Drizzling Rain.	Clear to cloudy	10-15	18-24
Bidar	21-25	38-41	Basavakalyan, Humanabad, Bidar – Thu –Wed –No Rain.	Clear to cloudy	6-14	14-20
Bagalkot	21-26	37-40	Bagalkot, Jamkhandi, Hungund, Mudhol – Thu –Wed –No Rain.	Clear to cloudy	8-16	15-18

Note: Above weather information is summary of weather forecasting given in following websites https://www.wunderground.com/?cm_nep=cgiRчद-राष्ट्रीय द्रादा संशोधन केंद्र, पुण https://www.timeanddate.com/weather/india

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

II. Water management

- a. Number of days after Fruit pruning: 177
- b. Expected Pan evaporation: 7 to 8.5 mm

Amount of irrigation advised:

- a. In case the soil is under wapsa (field capacity) condition, donot irrigate the vineyard.
- b. 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.
- c. From Veraison stage onwards till maturity, apply irrigation through drip @ 11,900 to 14,450 L/ acre/ day.

d. Whereever temperature is crossing 35°C, donot withhold irrigation during ripening to harvest stage for faster sugar accumulation, 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 :

Berry Development stage:

 After 8-10 mm berry size, start application of nitrogen in the form of ammonium sulphate @ 25kg /acre in 4 splits in calcareous soil and as urea @ 15 kg/acre in other soils in 3 splits. Follow this up with Sulphate of potash or 0-0-50 @ 25 kg/ acre in 3-4 splits for next two weeks.

2. If soils are calcareous, then apply zinc sulphate and ferrous sulphate @ 5-10 kg/acre at 65-70 days after pruning. Possibility of powdery mildew infection: Build up potassium levels in grapevine either through foliar spray @4-5 gm SOP/L and drip @ 15 kg SOP/L if not applied since last 20 days.

Ripening to Harvest stage:

- 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 @ 4g/L in calcareous soil.
- 3. Possibility of powdery mildew infection. Build up potassium levels in grapevine either through foliar spray @4-5 gm SOP/L and drip @ 15 kg SOP/L if not applied since last 20 days.
- 4. In case leaf curling/marginal leaf yellowing (potassium deficiency) and mites infection is observed, first control mites and then spray SOP@5g/L to take care of potassium deficiency and drip @ 15 kg SOP/L if not applied since last 20 days.
- 5. Manage canopy for adequate sunlight and air movement within the canopy for avoiding/ minimizing problems of berry cracking.

Rest Period

After the harvest of grapes during February – March, vine reserves are exhausted. After foundation pruning, till photosynthetically active leaves are formed, it is the vine reserves that contribute to the growth and development of the vines. Hence, following is advised:

- Provide only need based irrigation to protect the existing leaves from drying and also contribute towards increasing the reserves of the vines through photosynthetic activity. The quantum of irrigation water applied should be approx. 5000 – 6000 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. 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.
- 3. Flooding the vineyard is not advised as it will lead to wastage of water. Concentrate irrigation water application in the root zone only.

Foundation pruning:

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.
If soils are calcareous in nature, then apply 50 kg/acre 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.
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.

III. Canopy Management

Based on the present weather condition, following suggestions are offered.

1) The vineyard at harvest stage:

The vineyard at stage needs sufficient irrigation to maintain the berry turgidity. In many of the grape vineyard, it is seen that the grape growers are avoiding irrigation to the vine. In these vineyards, the sugar development may get advanced, however, cluster drying will be major problem. This is disturbing the balance between actual requirement and supply thereby causing the major problem like cluster drying (mummification). Hence, to control, the problem, sufficient irrigation needs to be applied. Application of calcium and magnesium through foliar spray may help to some extent (in the vineyard just after the initiation of verasion stage).

2) Vineyard after the re-cut:

In the vineyard after re-cut, the development of trunk as well as cordon should be in progress. While developing the trunk, the new growth should be at faster rate. The nutrient management at this stage plays

an important role. Application of only nitrogenous and phosphatic fertilizer through soil will help to push vegetative growth. In case of soil report with calcium carbonate availability in the vineyard, sulphur application will help to reduce the soil pH. Sufficient irrigation and nitrogen will help for faster growth.

The trunk should be developed using "stop and go" method. In this method, when the shoot growth is of 8-9 leaf stage, the pinching is done at 6-7 leaf. This will facilitate the growth of side shoots. These shoots are again pinched at 3-4 leaf and the upper sprout is tied to the bamboo and allowed to grow for next stop of trunk. The retention of 3-4 leaf on the shoot will help to store the food material and make the trunk thicker. The development of cordon also been done in the similar way.

3) Rootstock management:

The rootstock planted in the field during Jan-Feb might have been established with development of roots. The establishment of rootstock in the field means not only development of roots in the soil but also development of shoots above ground. The well-balanced rootstock plant in the filed have proper root: shoot ratio. To develop this, irrigation, and nutrition (N and P grade fertilizers) is needed. Under the situation of shortage of irrigation water in the vineyard, mulching should be done. The irrigation can also be done either during early morning or late evening to avoid evaporation losses.

IV. Disease mar	भारतीय कृषी संशोधन परिषद-राष्ट्रीय द्राक्ष संशोधन केंद्र, पुणे ICAR-National Research Centre for Grapes, Pune							
Dayspannafter	Risk of diseases							
fruit pruning	Downy mildew	Powdery mildew	Anthracnose	Others (specify)				
				Bacterial spot- Nil				
177	Nil	Low	Nil	Rust- Nil				

Application of *Bacillus subtilis*@2ml/L may be done for powdery mildew control.





Bacterial spot



Anthracnose







Downy mildew भारतीय कृषी संशोधन परिषद-राष्ट्रीय द्राक्ष संशोधन केंद्र, पुणे ICAR-National Research Centre for Grapes, Pune



V. Insect and Mite Pest Management

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 spot wash with any trisiloxane polyether-based surfactant @ 0.3 ml per litre water with water volume 10-12 litres per vine with single gun 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.

Growth stage: Newly grafted vineyards after recut

• For thrips management in new vineyards after recut, give regular applications of effective insecticides such as spinosad 45 SC @ 0.25 ml/l, spinetoram 11.7 SC @ 0.3 ml/l, cyantraniliprole 10 OD @ 0.7

ml/l, emamectin benzoate 5 SG @ 0.22g/l or fipronil 80 WG @ 0.0625 g/l water using knapsack sprayer when thrips population is 5 per shoot or above.

