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

WEATHER DATA FOR THE PREVAILING WEEK

Thursday (27/11/2025) – Wednesday (03/12/2025)

Location	Temperature (°C)		Possibility of Rain	Cloud Cover	Wind Speed (Km/hr) Min-Max	R H%
	Min	Max				
Nashik	13-15	25-26	Nashik, Ozar, Kalwan, Pimpalgaon Baswant, Dindori, Palkhed, Loni, Vani–Thu-Wed—No Rain.	Clear to cloudy	6-13	35-43
Pune	12-16	28-29	Pune, Phursungi, Loni Kalbhor, Uruli Kanchan, Patas, Yavat, Narayangaon, Baramati, Indapur–Thu-Wed—No Rain.	Clear to cloudy	6-13	30-39
Solapur	13-17	28-30	Solapur, Tuljapur, Ausa, Vairag, Barshi, Pandharpur, Nannaj, Latur– Thu-Wed—No Rain.	Clear to cloudy	20-30	26-37
Sangli	11-17	28-30	Sangli, Miraj, Walva, Palus, Kawtha, Palsi, Khanapur Vita, Shetphal, Shirguppi – Thu-Wed—No Rain.	Clear to cloudy	11-21	22-34
Vijayapura	11-17	27-29	Chadchan, Tikota, Telsang, Vijayapura–Thu–Wed- No Rain.	Clear to cloudy	14-30	20-39
Hyderabad	15-17	25-29	Hyderabad, Medchal, Zahirabad–Thu-Wed—No Rain.	Clear to cloudy	11-16	35-45
Satara	9-14	27-29	Satara, Khatav, Phaltan– Thu-Wed–No Rain.	Clear to cloudy	8-15	31-41
Ahmednagar	12-16	26-28	Sangamner, Rahata, Kopargaon, Akole, Ahmednagar, Shrigonda, Karjat, Jamkhed – Thu-Wed–No Rain.	Clear to cloudy	13-22	30-42
Jalna	13-16	26-27	Jalna, Ambad, Ghansavangi, Jafrabad, Mantha – Thu-Wed–No Rain.	Clear to cloudy	7-15	29-46
Buldhana	11-17	22-24	D.raja, Buldana, Chikhli, Sindkhed– Thu-Wed–No Rain.	Clear to cloudy	12-18	36-54
Kolhapur	13-17	26-28	Kagal, Karveer, Gagan-bavada – Thu-Wed–No Rain.	Clear to cloudy	8-13	27-50

Bengaluru Rural	14-17	20-28	Anekal, Doddaballapur, Bengaluru -east, Bengaluru-north, Bengaluru –Sat, Sun–Heavy Rain, Thu,Fri–Mon,Tues,Wed–No Rain.	Clear to cloudy	11-20	46-79
Belagavi	12-15	24-25	Belagavi, Gokak, Athni, Chikodi –Thu–Wed–No Rain.	Clear to cloudy	8-24	26-47
Bidar	13-16	23-25	Bidar, Humanabad, Basavakalyan –Thu–Wed–No Rain.	Clear to cloudy	11-14	38-55
Bagalkot	13-17	28-29	Bagalkot, Jamkhandi, Hungund, Mudhol–Thu–Wed–No Rain.	Clear to cloudy	17-30	20-37

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.timeanddate.com/weather/india

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

II. Water Management

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

Pan evaporation: 3.5 to 5 mm

Amount of irrigation advised :

1. In case the soil is under wapsa (field capacity) condition, donot irrigate the vineyard.
2. During **shoot growth stage** (Fruit pruning season), apply irrigation through drip @ 5950 - 8500 L/ acre/ day for all grape growing regions. In case vigour is more than desired, then reduce irrigation water application by half to 3000-4000 L/acre and stop nitrogen application. Still if growth is more, stop the irrigation till such time the growth is brought under control and then start irrigation.
3. From flowering to fruit setting, apply irrigation through drip upto 2000-2500 L/ acre/ day. Vigour needs to be 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. During Berry development stage, apply irrigation through drip @ 5950 - 8500 L/ acre/ day for all grape growing regions.

Soil and Nutrient management :

Shoot Growth stage

1. In case organic fertilizers are applied, check the C:N ratio. Lower the ratio more the nitrogen release, hence possibility of enhanced growth. Control nitrogen application based upon growth of vine.
2. Based upon the soil test value, during shoot growth stage apply urea @ 15kg / acre this week in two splits. If the soil is calcareous, instead of urea apply ammonium sulphate @ 25 kg/ acre in three splits this week. Depending upon the crop vigour, regulate nitrogen application.
3. If sodicity problem is there, apply 10 kg Sulphate of potash per acre in 2 splits this week.
4. Until and unless leaves are fully developed donot go for any foliar application of nutrients. It will lead to wastage of spray.
5. The quantity of nutrients to be applied through foliar, depends upon canopy size.
6. If the crop is between 5 leaf to prebloom stage, apply Zinc sulphate and Ferrous sulphate @ 15 kg/ acre based upon soil test value. Boron application should be carried out only if soil test value indicates low levels and the irrigation water does not contain boron. If during foundation puning, the petiole test stated that boron was deficient then apply boron @ 1.5 kg to 5 kg depending upon the soil test value. Apply one kg boron at a time.
7. Apply 10 kg Magnesium sulphate per acre if the crop is between 5 leaf to prebloom stage.
8. If soils are calcareous, spray Sulphate of potash and Magnesium sulphate @ 2-3g/L depending upon leaf age during prebloom stage.

Flowering to setting stage:

1. Donot apply any nitrogen based fertilizer just before Flowering to Setting stage to avoid problems of kooj (inflorescence necrosis).
2. Apply 3-4 kg Phosphoric acid in two to three splits this week. Remember that the pH of the irrigation water should be near 6.0. OR apply SSP @ 125kg/acre as basal application. SSP should be mixed with FYM/Compost before application to minimize phosphorus fixation.
3. **Petiole nutrient testing: At 70% capfall stage, petiole samples should be taken for nutrient analysis. The leaf opposite the bunch should be removed for sampling.**

Berry Development stage:

1. After Berry setting, continue initially with Phosphoric acid application @ 2 kg followed by 5 kg 12-61-0/acre.
2. If the berry size is from 2-4mm, spray calcium @ 2g Calcium Chloride / Calcium Nitrate per litre. Target sprays immediately after GA application (preferably next day) for better absorption.
3. If the berry size is from 5-8mm, spray calcium @ 2g Calcium Chloride / Calcium Nitrate per litre. Target sprays immediately after GA application (preferably next day) for better absorption.
4. After 6-8 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.
5. If soils are calcareous, spray Sulphate of potash and Magnesium sulphate @ 4-5g/ at 8-10mm berry size.

III. Canopy Management

Based on the present growth stages and weather condition in grape vineyard, following suggestions are offered.

1) **Canopy management for reducing disease infection:**

Present climatic situation is more favorable for Downey mildew infection. In early pruned vineyards incidence of Downey mildew was noticed severe. In such case need to manage canopy from early stages of bunch emergence and shoot growth. Remove extra unfruitful shoots. Remove 3-4 basal leaves if infection is increasing. If, the infection is in bunches and also on new leaves, then need to remove infected bunches along with shoots.

2) **Vineyard in pre- bloom stage:**

To achieve long, elongated bunches suitable for export (increased rachis length and internode distance), apply GA_3 only during the **pre-bloom stage**.

Recommended GA_3 Schedule (late-pruned vineyards):

- 1^{st} spray: GA_3 @ 10 ppm at parrot-green bunch stage (~18–19 days after fruit pruning)
- 2^{nd} spray: GA_3 @ 15 ppm (5–6 days after the first spray)

Keys to Maximise GA_3 Efficiency

- Water pH for spray solution: 6.5–7.0
- Final GA_3 solution pH: 5.5–6.0 → Adjust with citric acid @ 0.5 g/L or urea phosphate @ 1.0 g/L
- Spray when relative humidity > 60% → preferably in the evening

- Apply one spray of zinc + boron before GA_3 to enhance efficacy

3) The vineyard from pre- bloom stage to flowering stage:

The GA_3 spray can be given only during clear weather for better results. Removal of 2 to 3 basal leaf will help for good aeration and coverage of fungicide. In case of white seedless varieties (Thompson Seedless and Tas-A-Ganesh) during full bloom stage, GA3 spray @ 25 ppm can help for berry thinning as it acts as pollinicide.

The GA3 schedule for elongated varieties (Sonaka, Manik Chaman, Super Sonaka, Sarita Seedless, Krishna Seedless, SSN, etc) is different than the above. In these varieties, GA3 can be sprayed as below.

a) Pre-bloom stage: 10 ppm GA_3

b) Pre-bloom stage: 15 ppm GA_3

c) 25% flowering: 10 ppm GA_3

d) 50% flowering: 10 ppm GA_3

e) 60-80% flowering: 10 ppm GA_3

f) 90-100% flowering: 60 ppm GA_3

g) After berry set: 40-50 ppm GA_3 + 10 ppm IAA

4) Berry setting to 8 mm berry size:

The vineyard where berry setting is completed, bunch thinning and berry thinning need to be considered important. The bunches should be retained based on objectives (raisin, local market, and export). The retention of berries per bunch should be based on the bunch type, variety, etc. Berry retention based on the variety is as below.

Variety	No of rachis/bunch		No of berries/bunch	
	Local	Export	Local	Export
Thompson Seedless	12-14	10-12	130-140	100-120
Tas-A-Ganesh	12-14	10-12	130-140	100-120
Sonaka	14-16		140-150	130-140
Manik Chaman	14-16	12-14	140-150	130-140
Sarita Seedless	14-16	12-14	140-150	130-140
Red Globe	10-12	8-10	80-90	70-75
Nanasaheb Purple	10-12	8-10	80-90	75-80

Seedless				
Crimson Seedless	10-12	10-12	120-130	100-120

IV. Disease management

Days after fruit pruning	Risk of diseases			
	Downy mildew	**Powdery mildew**	**Anthracnose**	**Others (specify)**
66	High	Moderate	Low	Bacterial spot-Very Low Rust-Low

Application of Amisulbrom @ 0.375ml/L or cyazofamid 0.2ml/L may be given for downy mildew control in early flowering stage. CAA fungicides like iprovalicarb+propineb/mandipropamid/dimethomorph or Fluopicolide+Fosetyl Al may also be given for downy mildew control as well especially in top young leaves where disease is prevalent. Among the new molecules Oxathiopiprolin+Amisulbrom@312.5ml/acre will also give good results. Kasugamycin+copper oxychloride @ 0.75ml/L will also control bacterial spot diseases. As temperature will gradually go down, incidence of powdery mildew may be seen and application of sulphur @2-2.5g/L may be done. If the disease is already visible, hexaconazole or difenoconazole may be sprayed. Metrafenone or Polyoxin D Zinc salt or cyflufenamid will also control powdery mildew appreciably. Regular application of biocontrol agents may be continued.

VII. Insect and Mite Pest Management

Fruit pruning growth stage: Initial active shoot growth stage

Growth Stage: Pre flowering to berry setting after fruit pruning

- Regularly monitor vineyards for mealybug and stem borer infestation.
- For management of mealybug, tag infested vines and remove loose bark from main trunk and cordons. Then do spot treatment of mealybug infested vines with buprofezin 25 SC @ 1.25 ml per litre water (1.5-2.0 litres water per vine). Do not spray any broad-spectrum insecticides such as chlorpyrifos, dichlorvos, methomyl, profenophos, etc. for mealybug control. Higher humidity will favour development of natural enemies which will slowly kill mealybugs. In

case chemical spray is required, prefer buprofezin 25 SC @ 1.25 ml per litre of water for plant wash.

- To manage stem borer, mechanically remove the grub at the initiation of frass appearance near the vine.
- Incidences of new species of stem borer (red colour larva) may be noticed under bark in Sangali, Solapur, Nashik, Pune, Bijapur grape areas. Remove the loose bark and give good plant wash mainly targeting cordons and main trunk with entomogenous fungus *Metarhizium* spp.