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

WEATHER DATA FOR THE PREVAILING WEEK

Thursday (12/11/2026) – Wednesday (18/11/2026)

Location	Temperature (°C)		Possibility of Rain	Cloud Cover	Wind Speed (Km/hr) Min-Max	R H%
	Min	Max				
Nashik	11-15	30-31	Nashik, Ozar, Pimpalgaon Baswant, Dindori, Palkhed, Kalwan, Loni, Vani - Thu to Wed- No rain.	Clear to cloudy	04-11	22-28
Pune	13-16	30-31	Pune, Phursungi, Loni Kalbhor, Uruli Kanchan, Patas, Yavat, Narayangaon, Baramati, Indapur - Thu to Wed- No rain.	Clear to cloudy	05-10	26-30
Solapur	12-15	30	Solapur, Nannaj, Vairag, Ausa, Barshi, Tuljapur, Latur, Pandharpur - Thu to Wed- No rain.	Clear to cloudy	02-12	33-34
Sangli	13-16	31-32	Miraj, Sangli, Walva, Kawtha, Khanapur Vita, Palsi, Palus, Shetphal, Shirguppi - Thu to Wed- No rain.	Clear to cloudy	07-16	27-30
Vijayapura	15-18	30-32	Vijayapura, Chadchan Tikota, Telsang - Thu to Wed- No rain.	Clear to cloudy	13-20	24-28
Hyderabad	15-18	31-33	Hyderabad, Medchal, Zahirabad- Thu to Wed- No rain.	Clear to cloudy	12-18	28-31
Satara	12-15	30	Khatav, Satara, Phaltan- Thu to Wed- No rain.	Clear to cloudy	02-12	33-34
Ahmednagar	12-16	30-31	Ahmednagar, Shrigonda, Karjat, Jamkhed, Akole, Rahata, Kopargaon, Sangamner - Thu to Wed- No rain.	Clear to cloudy	11-19	22-32
Jalna	12-16	30-32	Jalna, Ambad, Ghansawangi, Mantha, Jafrabad- Thu to Wed- No rain.	Clear to cloudy	04-12	26-31
Buldhana	15-16	29-30	Buldhana, D. Raja, Sindkhed raja, Chikhli - Thu to Wed- No rain.	Clear to cloudy	10-17	26-32
Kolhapur	12-15	31-32	Kagal, Karveer, Gagan-bavada- Thu to Wed- No rain.	Clear to cloudy	06-13	27-31
Bengaluru Rural	14-16	28-29	Anekal, Doddaballapur, Bengaluru - east, Bengaluru-north,Bengaluru– - Thu to Wed- No rain.	Clear to cloudy	08-13	31-44
Belagavi	13-14	30-31	Belagavi, Gokak, Chikodi, Athni - Thu to Wed- No rain.	Clear to cloudy	07-16	27-32
Bidar	13-15	30-31	Bidar, Humanabad, Basavakalyan - Thu to Wed- No rain.	Clear to cloudy	09-15	32-35

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Bagalkot	15-18	30-32	Bagalkot Jamkhandi, Hungund, Mudhol- Thu to Wed- No rain.	Clear to cloudy	13-20	24-28

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 (Dr. A.K. Upadhyay):

Pan evaporation: 5 to 7.5mm

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 @ 8500 - 12750 L/ acre/ day for all grape growing regions. In case vigour is more than desired, then reduce irrigation water application by half to 4250-6350 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. During flowering to setting stage, apply irrigation through drip @ 2800 - 4200 L/ acre/ day for all grape growing regions.

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Soil and Nutrient management :

Pre-pruning operations – Fruit pruning season

1. Test the soil and irrigation water, to plan for nutrient and water management during fruit pruning season.
2. 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 @ 50kg/acre for similar purpose. The application should be alongwith FYM/compost etc. They should be mixed in the soil and not left on the top.
3. In case of calcareous soils, if SSP is applied as basal dose, mix with FYM/compost etc. to avoid phosphorus fixation.

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.

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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.

   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.

III. Canopy Management (Dr. P. H. Nikumbhe):

Based on the weather data and growth stages, the following suggestions are offered for vineyard management in an old vineyard:

1) Current Situation

Grape is a sensitive crop and reduced rainfall has led to a decline in soil moisture, while rising temperatures are increasing evaporation. As a result, vines experience water stress, bunch formation decreases, berry size remains small and fruit quality is affected. Heat also increases the risk of sunburn on

the berries. Although the black soil regions have a higher water-holding capacity, prolonged drought can still create serious problems.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):

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

Keys to Maximize 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

2) **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.

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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

3) **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 Seedless	10-12	8-10	80-90	75-80
Crimson Seedless	10-12	10-12	120-130	100-120

- Avoid GA_3 sprays under cloudy conditions.
- Shade nets and crop covers: Using 30–50% shade nets or non-woven covers can lower canopy temperature by 2–5°C, improve water-use efficiency, and prevent sunburn.
- Canopy management: Remove excess shoots but do not remove too many leaves. Ensure that emerging grape bunches remain under shade. At the same time, maintain airflow of the hot winds typical of October.
- Protection from wind: In areas with high wind speed, plant windbreak trees. This can reduce evaporation by 15–20%.
- Retain grape bunches based on production objectives (e.g., local market, export, or raisin production). Adjust bunch retention according to factors like vine spacing and cane diameter to optimize yield and quality.

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Water Management – The Most Important Aspect

- Drip irrigation and precise water scheduling: Drip irrigation is essential. Using subsurface (underground) drip systems reduces evaporation. Apply water only as needed by using soil moisture sensors. Irrigate in the morning or evening and avoid midday irrigation.
- Farm ponds and water storage: Construct farm ponds in every vineyard to store rainwater. Progressive farmers have saved crores of litres of water this way; this stored water should be used judiciously.

- Mulching: Apply bagasse, grass, leaf litter, or plastic mulch on the bunds. This helps regulate soil temperature, retains moisture, and saves 20–25% water. Combining mulching with anti-transpirant (Antistress) sprays further improves water savings.
- Regulated deficit irrigation: Mild water stress at certain growth stages (e.g., during bunch formation) can improve fruit quality, but severe stress must be avoided. Keep the soil at field capacity (wafsa condition).

IV. Disease management (Dr. Sujoy Saha):

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

Due to changes in night and day temperature, dew is observed on leaf surfaces and dusting of Mancozeb @ 3-5kg/acre is recommended. Downy may be observed in the bunches and an application of amisulbrom @375 ml/ha Cyazofamid @ 200 ml/ha/oxathiopiprolin+Mandipropamid @ 700 ml/ha/oxathiopiprolin+Amisulbrom @ 312.5 ml/ha/Fluopicolide+Fosetyl-Al 2.25 to2.5 kg/ha may be given for immediate protection. Care should be taken that there are no water droplets in the bunch due to dew. Powdery mildew infection will commence during this period and hence, an application of sulphur @ 2g/L may be given. If the vines are in flowering stage an application of triazoles / Fluopyram+tebuconazole @ 0.563 ml/L/Metrafenone @ 250 ml/ha/cyflufenamid @ 500 ml/ha/Pydiflumetofen+difenoconazole @ 500 ml/ha may be given. In Sangli region if there are sudden showers an application of Kasugamycin+COC @ 750 gm/ha may be given to avoid berry infections by anthracnose and bacterial spot.

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N.B: The date of foundation pruning is assumed to be on 15.09.26

V. Insect and Mite Pest Management (Dr. D.S. Yadav)

Fruit pruning growth stage: Dormant bud to sprouting

- Remove loose bark and give preventive plant wash with buprofezin 25 SC @ 1.25 ml/litre water. At 15 days interval, plant wash with entomopathogenic fungi viz. *Metarhizium*, *Beauveria* and *Lecanicillium* may be useful for controlling mealybugs and ants.

- Give soil drenching with *Metarhizium* just after fruit pruning to manage flea beetle larva, thrips pupa and ants in soil.
- For flea beetle management, remove weeds from inside and around the vineyards. Harrowing may be done in inter row space. Foliar application of lambda cyhalothrin 4.9 CS @ 200 ml per acre or imidacloprid 17.8 SL @ 160 ml per acre or fipronil 80 WG @ 25 g per acre or spinosad 45 SC @ 100 ml per acre may be given. The foliar spray may preferably to give at night.

Fruit pruning growth stage: Initial active shoot growth stage

- Jassid/leafhopper infestation may be seen. Foliar application of insecticides such as lambda cyhalothrin 4.9 CS @ 200 ml per acre or imidacloprid 17.8 SL @ 160 ml per acre or fipronil 80 WG @ 25 g per acre is effective. Care should be taken that the sprays should be done during night and install a white light bulb behind tractor and turn on during spraying for better results from the insecticidal sprays. Remove weeds from inside and around the vineyards. Install yellow sticky traps near ground to trap and kill jassids present in the vineyards.
- If the crop is nearing pre flowering, flowering and berry setting stages, application of spinosad 45 SC @ 100 ml per acre or spinetoram 11.7 SC @120 ml per acre preferably at night is effective against flea beetle and thrips. Application of emamectin benzoate 5 SG @ 88 gram per acre or cyantraniliprole 10 OD @ 280 ml per acre are effective against thrips and caterpillars.

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- Flea beetle infestation may be high during this period. For flea beetle management, remove weeds from inside and around the vineyards. Harrowing may be done in inter row space. Foliar application of lambda cyhalothrin 4.9 CS @ 200 ml per acre or imidacloprid 17.8 SL @ 160 ml per acre or fipronil 80 WG @ 25 g per acre or spinosad 45 SC @ 100 ml per acre may be given. The foliar spray may preferably to give at night.
- 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 fungi, *Metarhizium* spp. @ 3-5 ml/L water (water volume 1.5 litres per plant).



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