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

WEATHER DATA FOR THE PREVAILING WEEK

Thursday (21/08/2025) – Wednesday (27/08/2025)

Location	Temperature (°C)		Possibility of Rain	Cloud Cover	Wind Speed (Km/hr) Min-Max	R H%
	Min	Max				
Nashik	21-22	23-27	Nashik, Ozar, Kalwan, Pimpalgaon Baswant, Dindori, Palkhed–Thu–Mon–Drizzling to Light Rain. Tue–Wed–Drizzling Rain. Loni, Vani–Thu–Mon–Drizzling to Light Rain.Tue–Drizzling Rain. Wed–Light to Moderate Rain.	Clear to cloudy	25-32	83-95
Pune	21-22	24-26	Pune, Phursungi, Loni Kalbhor, Uruli Kanchan, Patas, Yavat, Narayangaon, Baramati, Indapur – Thu–Wed– Drizzling Rain.	Clear to cloudy	22-26	69-88
Solapur	20-21	29	Tuljapur, Ausa, Vairag, Barshi, Pandharpur, Nannaj, Latur, Solapur –Thu–Tue –Drizzling Rain. Wed–Light to Moderate Rain.	Clear to cloudy	21-28	54-83
Sangli	21-22	27-29	Sangli, Miraj, Walva, Palus, Kawtha, Palsi, Khanapur Vita, Shirguppi–Thu–Wed –Drizzling Rain. Shetphal–Thu–Tue –Drizzling Rain. Wed–Light to Moderate Rain.	Clear to cloudy	24-30	63-92
Vijayapura	20-21	28-30	Chadchan, Tikota, Telsang, Vijayapura–Thu–Wed–Drizzling Rain.	Clear to cloudy	26-34	55-86
Hyderabad	21-22	29-31	Hyderabad, Medchal, Zahirabad–Thu–Tue– Drizzling Rain, Wed–Heavy Rain.	Clear to cloudy	20-28	49-77
Satara	20-21	24-26	Satara, Khatav, Phaltan –Thu–Wed–Drizzling Rain.	Clear to cloudy	16-22	76-92
Ahmednagar	21-22	27-28	Sangamner, Rahata, Kopargaon, Jamkhed– Thu–Tue– Drizzling Rain. Wed – Drizzling to Light Rain. Akole – Thu–Sun,Tue,Wed – Drizzling Rain. Mon– Light to	Clear to cloudy	31-35	62-85

			Moderate Rain. Karjat, Ahmednagar, Shrigonda, – Thu– Mon – Drizzling Rain. Tue–Wed–Drizzling to Light Rain.			
Jalna	21-23	28-30	Jalna, Ambad, Ghansavangi, – Thu–Wed– Drizzling to Light Rain. Tue–Moderate to Heavy Rain. Mantha,Jafrabad–Thu–Mon–Drizzling Rain. Tue–Wed–Drizzling to Light Rain.	Clear to cloudy	21-26	55-84
Buldhana	22-23	28-31	D.raja, Buldana, Chikhli, Sindkhed –Thu,Fri–Tue,Wed–Drizzling Rain. Sat–Sun–Drizzling to Light Rain. Mon–Heavy Rain.	Clear to cloudy	22-24	63-90
Kolhapur	23-24	27-29	Kagal, Karveer, Gagan-bavada –Thu–Sun,Wed–Drizzling Rain. Mon–Tue–Drizzling to Light Rain.	Clear to cloudy	10-15	83-97
Bengaluru Rural	19-21	26-30	Anekal, Doddaballapur, Bengaluru -east, Bengaluru-north, Bengaluru – Thu–Wed– Drizzling Rain.	Clear to cloudy	9-19	44-88
Belagavi	21-22	25-28	Belagavi, Gokak–Thu–Mon–Drizzling to Light Rain, Tue–Wed–Drizzling to LightRain. Chikodi, Athni– Thu–Wed– Drizzling Rain.	Clear to cloudy	16-20	70-95
Bidar	20-21	29-30	Bidar, Basavakalyan, Humanabad –Thu–Mon, Wed–Drizzling Rain, Tue–Heavy Rain.	Clear to cloudy	20-27	63-87
Bagalkot	20-21	28-29	Bagalkot, Jamkhandi, Hungund, Mudhol – Thu–Wed– Drizzling Rain.	Clear to cloudy	21-29	54-85

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

Pan evaporation: 0 – 3 mm

Amount of irrigation advised :

a. There is possibility of drizzling to light rains in many regions. 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. **Cane maturity stage:** Apply irrigation through surface drip @ 0 to 1800 L/acre per day.
d. In case of monsoon rains, remove mulch cover on the bund and allow the rain water to seep into the soil. This will leach the accumulated salts in the rootzone. The mulch so removed can be mixed with the soil to improve the soil porosity.

Soil and Nutrient management :

1. In many of the grape growing areas, continuous spells of rains have been received and further also possibility of rains are there. The soils are already saturated. This has affected the rooting activity. Due to prolonged saturation, the roots may have started decaying. **Donot disturb the soil in the root zone. Wait for the soil to come to the wapsa condition before any soil related intervention has to be done.** Growth will be slow and cane maturity will be affected but donot worry. Only after wapsa, fertilizer application should be done.
2. Due to continuous sprays the leaf will not look healthy, need based sprays should be followed as the leaf health is bound to affect the photosynthate formation. This will impact cane maturity.
3. After current rains, give foliar spray of SOP @ 3-5 g/L depending upon canopy size.
4. In case of calcareous soils where acute iron deficiency is observed, repeatedly spray 2-3g/L Ferrous sulphate two to three times at 3 days interval followed by 15-20 kg/ acre Ferrous sulphate application through drip. The fertigation dose should be split into atleast 3 doses of 5kg each. Apply 5kg/ acre soluble sulphur through drip every week. Also spray magnesium sulphate and potassium sulphate @ 3 gm each/ L once only.
5. Possibility of leaf curling, check the leaf margins, if slight to more yellow, possibility of potassium deficiency. Foliar spray of SOP @ 3-4g/L followed by fertigation of 20-25 kg SOP/acre in 2 to 3 splits.

6. In coloured varieties like Jumbo, Nanasaheb Purple etc., leaf curling along with reddening/ bronzing of the leaf margin can be observed if potassium deficiency is there. Foliar spray of SOP @ 3g/L followed by fertigation of 20-25 kg SOP/acre in 2 to 3 splits.
7. The light intensity is reduced due to cloudy conditions, management of canopy to improve light penetration is important for cane maturity.

Cane maturity stage

1. After current rains, give foliar spray of SOP @ 4-5 g/L depending upon canopy.
2. Potassium application is required from Cane maturity stage onwards. Approx. 64 kg of sulphate of potash (soluble grade) should be applied in this stage. Split the application into atleast five doses to reduce the leaching losses of the potassium. Apply 15 kg SOP in two – three splits during this week. In calcareous soils, provide foliar application of Sulphate of Potash (@ 4g/L) once in this growth stage.
3. Apply magnesium sulphate @ 15 kg/acre in two splits. The application should be done during 60-75 days after pruning. In calcareous soils, provide foliar application of Magnesium sulphate (@3g/L) in this growth stage.
4. In case of calcareous soils where acute iron deficiency is observed, repeatedly spray 2-3g/L Ferrous sulphate two to three times at 3 days interval followed by 15-20 kg/ acre Ferrous sulphate application through drip. The fertigation dose should be split into atleast 3 doses of 5kg each.
5. To effectively manage calcareous soil, apply 5kg/ acre soluble sulphur through drip every week. Also spray magnesium sulphate and potassium sulphate @ 3 gm each/ L once only.
6. In case due to rains and for preventive control, if bordeax or copper sprays are given, then there is possibility of leaf reddening in coloured varieties like Krishna Seedless etc. No specific pattern will be there. This may be due to copper toxicity. Regulate copper sprays.
7. If weather forecast predicts good rainfall, then give foliar spray of SOP @ 4-5g/L depending upon the canopy size, before the advent of rains.
8. After cane maturity, raise Sunnhemp or Dhaincha for green manuring purpose.

Pre-pruning operations – Fruit pruning season

1. In case pruning is planned during August - September, raise Sunnhemp or Dhaincha for green manuring purpose.
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 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.
4. Test the soil and irrigation water, to plan for nutrient and water management during fruit pruning season.
5. In areas where rains have not been received and the irrigation water availability is less, it is suggested to flood the rootzone(only) with water to leach out the salts and wet the entire soil depth before pruning and then cover with mulch. Thereafter irrigate as per availability of water.

III. Canopy Management

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

1) Rainfall during cane maturity stage:

During this stage of growth, almost all the grape vineyards are experiencing rainfall. Due to continuous rains, the vegetative growth is continuing at faster rate. Under this condition, following problems will be noticed.

1) The leaf size is increasing
2) The emergence of side shoot is more
3) The shoot growth is more
4) Incidence of fungal diseases like anthracnose and downy mildew
5) Increase in gibberellin level in the vine
6) Delay in cane maturity
7) Formation of aerial roots on the trunk, cordon and even on the basal portion of cane

The following management practices are suggested to the grape growers.

1) **Control the shoot vigour**: To achieve proper cane maturity in grapevine, vigour needs to be kept under control. Shoot pinching is a practice for controlling the vigour. Application of potassic fertilizers (based on the shoot age) through drip and also through foliar sprays can help to control the vegetative growth. At this stage, hard pinching can be avoided as this will lead to emergence of more side shoots and bunches,
2) **Disease control**: In many of the grape vineyard, anthracnose is becoming a major problem. On each shoot, 16-17 leaf having 160-170cm^2 leaf area are sufficient. During this stage, the growth is faster. Hence the growth above the requirement should be removed immediately. This will help to control further spread of anthracnose from leaf to shoot. With the increase in shoot vigour during rainy period, side shoot development, shoot tip growth at faster rate, increase in leaf size are the common phenomenon. This condition creates the canopy congenial for the development of fungal diseases like powdery mildew during dry weather and downy mildew during cloudy and rainy period.

To achieve cane maturity, the canopy should be kept open so as to get uniform sunlight on each bud. Arrangement of shoots on foliage wire in such a way that each shoot will be exposed to the sunlight. Removal of side shoots at the earliest will help to obtain open canopy. This will reduce microclimate in canopy thereby facilitating for uniform spray coverage to control diseases.

3) **Control of aerial roots:** With the continuous rains in the vineyard, the water gets stagnated in root zone. The water covers the space in root zone and thus the pore spaces get blocked. Due to this the roots (new and old) in the root zone starts rotting turning into black. Such roots are not functional to support the vine for further growth and development. As a part of defence mechanism, the aerial roots are formed on the upper part of vine (trunk, cordon and shoots) for its nourishment. Formation of aerial roots will not affect the growth. However, removal of stagnated water from the root zone should be given the priority.

Preparation of rootstocks for grafting:

The period of grafting of new variety on the rootstock planted during February-March will be from first week of August. During this period, the temperature (34-35^{0}C) and 80-90% relative humidity will be available. This condition will favour the successful grafting in the field condition. However, before the grafting, the rootstock should possess following characters.

1) The rootstock shoot should be of 8-10 m diameter at about 30cm above the ground.

2) The shoots of rootstock should be straight.
3) The rootstock shoot should be healthy.
4) The shoots should be in sap flow condition.

To achieve this, the appropriate type of shoots needs to be retained while the remaining shoots to be removed. Under the condition of excess number of shoots, retain only three to four straight growing with larger internode and proper thickness. If the shoot has more side shoots, it need to be removed to obtain straight and thick shoot at the graft position. Hence, at least 15 days before the actual grafting, the rootstock shoots to be prepared.

IV. Disease management

Days after foundation pruning	Risk of diseases			
	Downy mildew	Powdery mildew	Anthracnose	Others (specify)
114	Moderate	Low	High	Bacterial spot- Moderate Rust- Low

As rainfall is intermittent and moderate in all grape growing areas, there is a possibility of heavy anthracnose and bacterial blight infection. Two sprays of Thiophenate methyl or carbendazim @ 1g/L or copper sulphate + mancozeb @ 5g/L may be given for the control of anthracnose. For the control of both anthracnose and bacterial spot an application of kasugamycin + copper oxychloride @0.75g/Lmay be given as a preventive measure. Any triazole application will also control anthracnose. Application of Mancozeb@2-2.5g/l or copper hydroxide 53.8DF @ 1.5g/L may be done to control downy mildew. Application of systemic fungicides need not be done at this stage. One foliar application of Trichoderma should be given along with drip application of Trichoderma. In powdery mildew prone areas, an application of *Ampelomyces quisqualis* @ 5g/L may be applied. For control of rust a spray of chlorothalonil@2g/L may be given.

V. Insect and Mite management

- Due to optimum weather conditions, mealybug infestation may be noticed. Use of broad spectrum insecticides should be avoided for mealybug control. Buprofezin 25 SC @ 1.25 ml/l water may be given to manage mealybugs. Preventive plant wash, on stem and cordons, of biocontrol agents such as *Verticillium, Metarhizium, Beauveria* may be given. In case of mealybug infestation on canes, foliar application of imidacloprid 17.8 SL @ 0.4 ml per litre water should be given.
- In case of thrips or caterpillar infestation, remove excess canopy. Application of emamectin benzoate 5 SG @ 0.22 g per litre water is effective. Light traps may be installed outside the vineyards to manage moths for reducing caterpillar infestation.
- Red colour stem borer (*Dervishiya cadambae*) has started egg laying and infestation under bark in grape areas. Install light traps near the vineyards to manage moths of this stem borer. Remove loose bark from stem and cordons and give preventive wash on stem and cordons with biocontrol agent *Metarhizium* @ 3-5 ml per litre water minimum once in the month during July to September months. If infestation is observed, remove the loose bark and give stem and cordon wash with *Metarhizium* @ 3-5 ml per litre water and 1.5-2 litres water per plant.