

ICAR-NATIONAL RESEARCH CENTRE FOR GRAPES, Manjri, Pune. WEATHER DATA FOR THE PREVAILING WEEK



Thursday (01/08/2024)– Wednesday (07/08/2024)

	Temperature (°C)			Cloud	Wind Speed (Km/br	R H%	
Location	Min	Max	Possibility of Rain	Cloud Cover) Min- Max	Min	Max
Nashik	22-23	25-29	Vani, Loni, Nashik,Dindori,Ozar, Pimpalgaon Baswant, Palkhed, Kalwan — Thu – Wed – Light to Moderate Rain.	Clear to cloudy	25-31	80-92	93-95
Pune	21-22	24-27	Pune, Phursungi, Loni Kalbhor, Uruli Kanchan, Patas, Yavat, Narayangaon,- Baramati, .Indapur –Thu – Wed –Drzzling to Light Rain .	Clear to cloudy	22-26	71-79	87-89
Solapur	21-23	29-33	Tuljapur.Latur,Ausa,Vairag,Barshi,Nannaj-Thu-Wed-DrzzlingRainSolapur.PandharpurThu-Wed-Moderate to Heavy Rain	Clear to cloudy	26-27	56-64	78-82
Sangli	20-22	26-29	Palsi, Khanapur Vita. Shetphal, ,Shirguppi, Walva, Palus, Miraj, Kawthe – Thu – Wed –Drzzling to Light Rain.	Clear to cloudy	26-28	69-78	88-92
Vijayapura	21-23	28-31	Vijayapura, Chadchan, Tikota , Telsang– Thu – Wed –Drzzling Rain .	Clear to cloudy	30-34	58-66	79-83
Hyderabad	22-24	25-31	Hyderabad, Medchal, -Thu – Wed – Drzzling Rain . Zahirabad- Thu – Wed –Drzzling to Light Rain .	Clear to cloudy	24-27	53-71	77-83
Satara	20-21	24-29	Satara, Khatav, Phaltan — Thu – Wed – Light to Moderate Rain.	Clear to cloudy	16-21	76-85	91-92
Ahmednagar	21-23	25-32	Rahata, Kopargaon, Sangamner, Akole, Shrigonda, Ahmednagar , Karjat, Jamkhed- Thu –Wed – Drzzling to Light Rain.	Clear to cloudy	28-32	64-78	83-89
Jalna	21-23	23-31	Mantha, - Ambad, Ghansavangi, Jalna, Jafrabad– Thu – Wed – Light to Moderate Rain.	Clear to cloudy	20-23	59-82	86-89
Buldhana	22-23	24-31	Chikhli Sindkhedraja , D.raja , Buldana – Thu – Wed – Light to Moderate Rain.	Clear to cloudy	21-25	65-80	87-90

Kolhapur	21-22	25-28	Kagal, Karveer, Gagan-bavada – Drzzling to Light Rain .	Clear to cloudy	19-24	76-85	90-91
Bengaluru Rural	20-21	27-28	Anekal,Doddaballapur,Bengaluru-east,Bengaluru-north,Bengaluru-Thu - Wed - DrzzlingRain .	Clear to cloudy	18-24	54-62	84-87
Belagavi	22-23	25-26	Belagavi, Gokak , Chikodi, Athni - Thu - Wed Drzzling to Light Rain .	Clear to cloudy	16-19	89-90	94-95
Bidar	21-23	26-31	Basavakalyan , Humanabad , Bidar — Thu – Wed – Drzzling Rain .	Clear to cloudy	22-26	63-76	87-89
Bagalkot	21-22	26-30	Hungund , Bagalkot , Jamkhandi, Mudhol –Thu – Wed – Drzzling Rain .	Clear to cloudy	28-29	56-68	76-82

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

III. Canopy Management

Based on the weather data and growth stages, following suggestions are offered for vineyard management.

A) Old vineyard:

- 1. The recent rainfall has increased humidity in the atmosphere. This will help to increase the shoot vigour.
- 2. The new growth coinciding with continuous rains will make the vine more susceptible for fungal diseases like downy mildew and anthracnose.

- 3. The vineyard after 90 days might be in the stage of cane maturity. If the new growth continues, the cane maturity will be delayed. Shoot pinching and removal of side shoot will help to create open canopy thereby reducing the chances of humidity build-up. The disease load will be reduced with effective coverage.
- 4. Training of shoots on foliage wire will help for aeration in the canopy thereby reducing the chances of diseases. This will also help for uniform spray coverage of insecticides/ fungicides used for the control of pest and diseases.
- 5. Application of potash through drip @ 1.0 to 1.25 kg per acre and spray @ 3.5 to 4.0 g/L water will help to advance cane maturity.
- 6. In many vineyards, irregular cane maturity is experienced by the grape growers. Bourdeaux spray @ 0.75 to 1.0% at 10 days interval will help to control the problem.
- 7. In case of leaf yellowing which is basically due to the deficiency of ferrous, magnesium and potash created by availability of calcium carbonate in excess amount in the soil. Hence, application of sulphur mixed with FYM will help to overcome the problem. At this stage, FYM application may not be possible. Under such condition, soluble grade ferrous and magnesium can be applied through drips.
- 8. To achieve regular cane maturity, application of phosphorous and potash grade fertilizer can be applied in the soil. Avoiding the stress to the vine will control this problem to certain extent. Spraying of Boudreaux mixture @ 0.75 to 1.0% and also drenching through soil will help to control.

B) New vineyard:

- Due to recent rains in vineyard, there will be vigorous growth of new shoots. Under the situation of delayed cordon development, spraying of cytokinin based PGR (6BA @ 10 ppm) will help to increase cytokinin and reduce gibberellin level in the vine.
- 2) Control of shoot vigour is most important to achieve fruit bud differentiation. Hence, potash to be sprayed at minimum concentration of 2.0 to 2.5 g/L water.
- Considering the bud differentiation, 2 to 3 sprays of 0.52.34 @ 2.0 to 2.5 g/L water can be given.
- 4) Extension of cordon will help to develop fruitful canes. At this stage, application of soluble fertilizer like 12:61:0 @ 1.25 to 1.5 kg/acre should be applied. In addition, DAP @ 25kg/acre as a basal dose should also be applied.

5) Since the shoot growth is coinciding with rainfall and high humidity, application of cytokinin based PGR will help to accelerate fruit bud differentiation. Once the new shoots are of 5-6 leaf stage, pinching should be done at 4-5 leaf. This should be followed by spraying of 0:52:34 @ 2.0 to 2.5 g/L water.

C) Rootstock plots:

- The period of grafting new varieties on rootstock is approaching. Selection of specific scion is more important considering the life span of any variety.
- 2) Preparation of rootstock 10 days before grafting is required. Retention of 3-4 straight growing, vigorous and healthy rootstock shoots should be done before the grafting. In case of excess shoots available, shoot thinning to be done. In addition, the removal of side shoots in at least two instalments can be done to achieve straight and thick shoot (approx. 8.0 mm) at 1.0 feet height above the ground.

IV. Disease management

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

Two sprays of Kasugamycin 5% +Copper Oxychloride 45% WP @750g/ha, may be given in all grape growing areas to manage bacterial spot and anthracnose due to the continuous rains presently in most of the areas. Application of Thiophenate methyl/carbendazim @1g/L will provide a good control against anthracnose. Downy mildew can be prevented by application of mancozeb which can also control bacterial spot. In Sangli area where powdery mildew attacks are reported, an application of triazoles like hexaconazole @1ml/L might help. A foliar application of Trichoderma@ 4-5ml/L may

be given as the moisture conditions will be suitable for multiplication of the biocontrol agents. Drip application of Trichoderma should continue at fortnightly intervals but it can be put in hold till the rain stops in Sangli and adjoining regions.





Bacterial spot



Anthracnose

V. Insect and Mite management

- Due to optimum weather conditions, mealybug infestation may be noticed. Use of broadspectrum insecticides should be avoided for mealybug control. Preventive plant wash, on stem and cordons, of biocontrol agents such as *Verticillium, Metarhizium, Beauveria* may be given. In case of shoot malformation, remove excess shoot growth and give foliar spray of imidacloprid 17.8 SL @ 0.4 ml per litre water.
- In case of thrips or caterpillar infestation, remove excess canopy. Application of fipronil 80 WG @ 0.0625 g per litre or 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.
- Mite infestation may start appearing, therefore, monitor the vineyards carefully. If mite infestation is observed, sulphur 80 WDG @ 1.5-2.0 gram per litre or abamectin 1.9 EC @ 0.75 ml/l water is effective.
- 4. 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 spot stem and cordon wash with *Metarhizium* @ 3-5 ml per litre water and 1.5-2 litres water per plant on the infested plants only.
- 5. In new vineyards, flea beetle infestation may be observed. In case of heavy infestation, give soil drenching with imidacloprid 17.8 SL @ 1.5 ml per plant and foliar application with spinetoram 11.7 SC @ 0.3 ml per litre or fipronil 80 WG @ 0.0625 g per litre water.