

मौसम पूर्वानुमान आधारित साप्ताहिक सलाह

Weather Forecast Based Weekly Advisory

(Assumption: Foundation Pruning date - 15/04/2017)

I. Weather Data for the Prevailing Week

Thursday (15/06/2017) - Thursday (22/06/2017)

Location	Temperature (°C)		Possibility of Rain	Cloud Cover	Wind Speed (Km/hr)	R H%	
	Min	Max				Min	Max
Nasik	23-24	29-31	Nashik -Thu toThu drizzling Shirdi, Loni, Rahata- Fri to Sat drizzling , Sun To Thu light rain Pimpalgaon, Ojhar, Palkhed, Vani Dindori- Thu toThu drizzling Devla, Niphad, Kelvan, Satana- Fri to Tue drizzling , Wed to Thu light rain	Partly Cloudy	14-26	68-74	92-94
Pune	22	26-28	Pune, Phursungi - Thu to Mon light rain ., Tue to Thu moderate rain Loni Kalbhor, Uruli Kanchan, Patas Yavat, Supa, Baramati- Sat, Wed drizzling , Thu to Fri, Sun to Tue, Thu light rain Narayangaon, Junnar- Tue To Thu light rain	Cloudy	11-24	77-85	96-99
Solapur	22-23	29-31	Solapur, Nanaj - Fri to Sun, Tue to Thu drizzling , Thu, Mon light rain Vairag- Sat, Wed drizzling , Thu to Fri, Sun to Tue, Thu light rain Kati- Fri to Sun, Tue to Thu drizzling , Thu & Mon light rain Tuljapur, Osmanabad - Thu to Thu light rain Latur- Wed drizzling , Thu to Tue, Thu light rain Ausa- Thu drizzling , Thu to Tue, Thu light rain Pandharpur- Thu to Fri, Sun, Tue to Thu drizzling , Sat & Mon light rain Kasegaon- Wed to Thu drizzling , Thu to Tue, Thu light rain Atpadi- Thu, Sat to Sun, Thu drizzling , Fri, Mon to Wed light rain Pangri, Barshi- Sat, Wed drizzling , Thu to Fri, Sun to Tue, Thu light rain	Partly Cloudy	11-29	68-80	97-100

Sangli	23	29-31	<p>Sangli- Sun drizzling, Thu to Fri, Mon, Wed to Thu light rain, Sat and Tue moderate rain</p> <p>Kavatha - Thu to Mon drizzling, Tue light rain</p> <p>Palus, Valva - Thu to Thu light rain</p> <p>Tasgaon- Thu, Wed & Thu drizzling, Fri to Tue moderate rain,</p> <p>Miraj- Thu to Fri drizzling , Sun to Mon light rain , Sat & Tue moderate rain</p> <p>Shirguppi- Fri & Sun drizzling, Mon & Thu light rain, Sat , Tue & Wed moderate rain</p> <p>Kagvad- Thu to Fri, Sun drizzling, Mon, Wed & Thu light rain , Sat & Tue moderate rain</p> <p>Arag- Sun moderate, Thu, Fri, Mon, Wed & Thu light rain, Sat moderate rain, Tue- Good rain</p> <p>Shetfal - Fri, Sun, Tue to Thu drizzling, Thu, Sat & Mon light rain</p> <p>Palsi- Thu, Sat to Sun, Tue to Thu drizzling, Fri & Mon light rain</p> <p>Khanapur- Tue & Wed drizzling, Thu to Mon & Thu light rain</p> <p>Vite- Thu & Thu drizzling , Fri to Wed light rain</p> <p>Shirol- Fri & Sun drizzling, Thu, tue to thu light rain Sat & Mon moderate rain</p>	Partly Cloudy	11-32	64-78	92-96
Bijapur	22-23	30-31	<p>Bijapur - Thu, Sat to Sun, Tue to Thu drizzling, Fri to Mon light rain</p> <p>Tikota, Telsang- Thu, Sun, Wed- Thu drizzling, Thu to Fri, Mon light rain</p> <p>Chadchan- Thu to Fri, Sun & Wed drizzling, Sat, Mon, Tue & Thu light rain</p>	Partly cloudy	13-31	65-77	94-98
Hyderabad	23	30-33	<p>Hyderabad- Sun, Tue & Wed drizzling, Thu, Sat, Mon & Thu light rain, Fri- Good rain</p> <p>Zahirabad- Thu, Sun, Wed & Thu drizzling , Sat, Mon & Tue light rain</p> <p>Fri- Good rain</p> <p>Medchal- Wed to Sun drizzling, Thu, Sat, Mon, Tue & Thu light rain, Fri- Good rain</p>	Partly cloudy	10- 26	69-95	99-100

Note: Above weather information is summary of weather forecasting given in following websites
<http://www.imd.gov.in/>, <http://wxmaps.org/pix/prec6.html>, <http://www.fallingrain.com/world/IN/>,
<http://www.wunderground.com/>, <http://www.bbcweather.com-weather/1269750>, etc..

II. a) Days after pruning: 60 days.

b) Expected growth stage of the crop: 45-65 days - fruit differentiation – Subcane development.

III. Water management (Dr. A.K. Upadhyay)

Expected pan evaporation: 5 to 6.5 mm

Amount of irrigation advised:

1. All the grape growing regions are forecasted to receive from drizzle to light to good rains. The irrigation water application should be based upon the growth of the vines. In case rain exceeds 5 mm on a given day, irrigation water application can be skipped for that day. Generally, under wapsa (field capacity) condition of the soil, donot apply irrigation.
2. Sometimes heavy rains are received in very short time period. Eventhough the upper soil layer of few cms may be wet but water donot penetrate below. Vineyards need to be irrigated under such conditions. Monitor leaf curling/cupping symptoms for moisture stress in case of doubt.
3. During Fruit bud differentiation stage and Cane maturity stage, apply 3000 to 4000 L/ acre / day.

IV. Soil and Nutrient requirement (Dr. A.K. Upadhyay)

Fruit bud differentiation stage

1. During fruit bud differentiation stage, based upon soil test values, apply 45 – 50 kg phosphoric acid or 250 kg SSP in case the soils are deficient in phosphorus. Phosphoric acid application is desirable in calcareous soils.
2. Keep a close watch on the development of leaf blackening symptoms from the margin. This could be due to sodium toxicity and potassium deficiency. In case the problems are observed, moistened the bund and mix gypsum in the moistened soil @100 kg /acre. In case of calcareous soils apply sulphur @ 75kg/acre. This should be followed by application of SOP @ 25-30 kg/acre or 0-0-50 in splits through drip.
3. Apply 10-15 kg Magnesium Sulphate/ acre between 50-60 days after pruning.
4. In calcareous soils, provide foliar application of Magnesium sulphate (@3g/L) followed by SOP (@ 4g/L).
5. In case of calcareous soils where acute iron deficiency is observed, repeatedly spray 2-3g/L Ferrous sulphate two to three times at 4-5 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.

Cane maturity and Fruit bud development stage:

1. 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 at least five doses to reduce the leaching losses of the potassium. Apply 15 kg SOP in two – three splits during this week.

V. Requirement of growth regulators (Dr. S.D. Ramteke)

Nil.

VI. Canopy management (Dr. R.G. Somkuwar)

With rainfall in many areas, the atmosphere became humid. This has encouraged more vegetative growth. The excess growth in old vineyard will delay the cane maturity while in new vineyard it may hamper the fruit bud differentiation. Hence, in old vineyards, shoot tip pinching and application of 0:0:50 @ 1 Kg/acre/day through drip or 3-4 g/L spray may help to control growth. In new vineyard, removal of side shoots and shoot tip pinching in addition to spray of PGR will help to achieve fruit bud differentiation.

VII. Disease management (Dr. S.D. Sawant and Dr. Sujoy Saha)

Days after pruning	Risk of diseases			
	Downy mildew	Powdery mildew	Anthracnose	Others (specify)
60	Moderate	Nil	low	Low Bacterial leaf spot

In Sangli region due to the probability of constant rains, temperature might go below 30°C or and infection of downy mildew may be seen. Application of potassium salt of phosphoric acid @2g/l +Mancozeb @2g/L for downy mildew control is recommended. In Nashik, Pune, Sholapur and Narayangaon where late pruning has been done, anthracnose and/or bacterial leaf spot may be visible in the new sprouts due to the recent showers, and a tank-mix of thiophenate methyl@1g/L+Mancozeb @2g/L will control the diseases. For timely pruned vines, application of copper hydroxide @ 2.5-3g/L is advised as a prophylactic action against downy mildew.

VIII. Insect and Mite management. (Dr. D.S. Yadav)

Caterpillar (*Spodoptera litura*) infestation may increase in most of the grape areas as humidity is increasing. Thrips incidence may be higher in vineyards where sub-cane process has not been completed. For the management of both caterpillars and thrips, emamectin benzoate 5 SG @ 0.22 g/litre or fipronil 80 WG @ 0.06 g/litre water may be given. Mite infestation may also be observed on older leaves in areas not experiencing good rainfall. In such cases, foliar application of sulphur 80 WDG @ 2.0 g/litre water may be given.

Due to build-up of relative humidity, plant wash with entomopathogenic fungi viz. *Metarhizium*, *Beauveria* and *Lecanicillium* may be useful for controlling mealybug and stem borer adults.

Do not spray any broad spectrum insecticides for mealybug control as higher humidity will favour development of natural enemies which will slowly kill mealybugs.

Adults of stem borer *Stromatium barbatum* are still emerging. Installation of light traps will be helpful in monitoring the initiation of emergence of stem borer adults. Run the light traps for 3 hours daily, during evening between 7.00 pm – 10.00 pm and destroy the collected beetles in water mixed with insecticide. If adult stem borers are noticed, application of fipronil 80 WG @ 0.06 g/litre, lambda cyhalothrin 5 CS @ 0.5 ml/litre or imidacloprid 17.8 SL @ 0.3 ml/litre water may be given directed at main stem and cordons during night.

Crop advisory relevant to different places is prepared by experts, considering forecasted weather, crop growth stages in majority of vineyards and ground information on incidence of different conditions in different grape growing areas received from regular interaction with progressive grape growers. No claims are made on its correctness.

Usefulness of this information may be communicated to us at director.nrcg@icar.gov.in.