Weather Forecast Based Weekly Advisory

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

I. Weather Data for the Prevailing Week
Thursday (31/08/2017) - Thursday (07/09/2017)

<table>
<thead>
<tr>
<th>Location</th>
<th>Temperature (°C)</th>
<th>Possibility of Rain</th>
<th>Cloud Cover</th>
<th>Wind Speed (Km/hr)</th>
<th>R H %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nasik</td>
<td>21-22 Min 27-29</td>
<td>Nashik, Ojhar, Palkhed, Dindori, Vani Pimpalgaon, Kalwan, Devl Niphad, Baswant, Shirdi, Loni, Satana, - Drizzling Thu to Thu</td>
<td>Partly Cloudy</td>
<td>05-26 Min 67-76 Max 96-99</td>
<td></td>
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<tr>
<td>Pune</td>
<td>21-22 Min 29-30</td>
<td>Pune, Phursungi – Drizzling Thu to Mon Light Rain Thu to Wed Loni Kalbhor, Uruli Kanchan, Yavat, Patas, Supa, Baramati, - Drizzling Sat to Tue Light Rain Wed &amp; Thu Narayangaon, Junnar - Drizzling Thu to Thu</td>
<td>Partly to Mostly cloudy</td>
<td>06-24 Min 62-72 Max 94-98</td>
<td></td>
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<tr>
<td>Solapur</td>
<td>21-22 Min 29-30</td>
<td>Solapur, Vairag, Nanaj, Kati - Drizzling Thu to Wed Light Rain Thu Kasegaon, Atpadi, Osmanabad, Pandharpur – Drizzling Thu to Thu Latur, Ausa – Drizzling Mon to Thu Pangri, Barshi – Drizzling Thu to Tue Light Rain Wed &amp; Thu Tuljapur- Drizzling Tue &amp; Wed</td>
<td>Partly to mostly cloudy</td>
<td>06-16 Min 62-69 Max 90-100</td>
<td></td>
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<tr>
<td>Bijapur</td>
<td>22-23 Min 30-31</td>
<td>Bijapur, Tikota – Drizzling Thu to Tue Light Rain Wed &amp; Thu Telsang – Drizzling Thu to Thu Chadchan – Drizzling Thu to Wed Light Rain Thu</td>
<td>Partly to Mostly Cloudy</td>
<td>05-21 Min 57-64 Max 91-98</td>
<td></td>
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<tr>
<td>Hyderabad</td>
<td>22-23 Min 29-30</td>
<td>Hyderabad Zahirabad, Medchal – Drizzling Sun &amp; Mon Light Rain Tue to Thu</td>
<td>Partly Cloudy</td>
<td>00-10 Min 64-76 Max 94-100</td>
<td></td>
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</tbody>
</table>

Note: Above weather information is summary of weather forecasting given in following websites
http://www.wunderground.com/, http://www.bbcweather.com/weather/1269750, etc.,

II. a) Days after pruning: 137 days.

b) Expected growth stage of the crop: Post cane maturity resting stage
III. Nutrition and irrigation management (Dr. A.K. Upadhyay)

Pan evaporation: 4-6 mm

Water management

1. All the grape growing regions are forecasted to receive from drizzle to light rains. Generally, under wapsa (field capacity) condition of the soil, do not apply irrigation. In general, there will not be any need to provide irrigation in areas which have witnessed continuous rains since last 3-4 days.

2. Provide irrigation through drip @ 2500 - 4000 litre/acre/day in case no rains are received. Observe the vine growth before irrigation water application.

Nutrient management

1. After Cane maturity stage, fertilizer application is over. Look for the sodicity problems. Soil, petiole and water reports will give information on extent of build up of sodicity in soil. Apply gypsum to the soil for removal of sodium from the soil exchange complex. In case of calcareous soils, use sulphur for similar purpose. Gypsum/sulphur should be properly mixed in soil. The soil should be moist. After approx. 20 days adequate should be provided to leach sodium from the soil.

2. If soils are calcareous in nature, then apply 50 kg sulphur between the vines in the soil. The sulphur should be properly mixed in the soil for improving its efficacy in taking care of calcium carbonates. The efficacy of sulphur is improved if FYM/ Compost are applied along with sulphur and mixed in the soil.

3. If fruit pruning is scheduled in next 15-20 days, test your field soil and irrigation water and plan nutrient management accordingly.

4. In case pruning is scheduled during October, green manuring with Sunnhemp / Dhaincha is advised. In sodic soils, dhaincha is preferred.

5. Remove mulch applied during Foundation pruning and loosen the soil for improving movement of water through the root zone to reduce salts accumulated in the root zone. Organic mulch can be mixed in the soil to improve the porosity of the soil.

6. Apply FYM/ other organic sources including green manuring atleast 12-15 days before pruning. If possible mix 200 kg Single super phosphate in the FYM and apply in the soil. Application of organics improves the nutrient and water retention in the root zone and reduces nutrient losses from the profile.

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

Nil.

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

Nil.

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

<table>
<thead>
<tr>
<th>Days after pruning</th>
<th>Risk of diseases</th>
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<tr>
<td></td>
<td>Downy mildew</td>
</tr>
<tr>
<td>137</td>
<td>Moderate</td>
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</table>

As rains are predicted around Thursday, it is advised to hold on to all chemical sprays. At pre-pruning stage(before 7-8days) soil drench of *Trichoderma* sp may be given.
VII. Insect and Mite management. (Dr. D.S. Yadav)

Growth stage: Cane maturity and afterwards

- Caterpillar (*Spodoptera litura*) infestation may increase in most of the grape areas as humidity is increasing. For the management of caterpillars, 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 such cases, foliar application of sulphur 80 WDG @ 2.0 g/litre water may be given.
- Mealybug population and movement of ants may be noticed under the bark. Due to possibility of rains and build-up of relative humidity, plant wash with entomopathogenic fungi viz. *Metarhizium*, *Beauveria* and *Lecanicillium* may be useful for controlling mealybugs and ants.
- 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.
- 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 broad spectrum insecticides, for example, lambda cyhalothrin 5 CS @ 2.5 ml/l.

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.