Weather Forecast Based Weekly Advisory

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

I. Weather Data for the Prevailing Week
Thursday (17/08/2017) - Thursday (24/08/2017)

<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></td>
<td>Min</td>
<td>Max</td>
<td></td>
<td></td>
<td>Min</td>
</tr>
<tr>
<td>Nasik</td>
<td>22-23</td>
<td>25-29</td>
<td>Nashik, Ojhar, Palkhed, Dindori, Vani, Pimpalgaon - Drizzling - Thu to Thu, Satana, Kalwan, Devla Niphad, Baswant - Drizzling Thu to Sat &amp; Tue to Thu Light Rain Sun &amp; Mon Shirdi, Loni- Drizzling Thu to Sat &amp; Mon to Thu Light Rain Sun</td>
<td>Mostly Cloudy</td>
<td>10-19</td>
</tr>
<tr>
<td>Pune</td>
<td>22-23</td>
<td>26-30</td>
<td>Pune, Phursungi - Drizzling Thu to Fri &amp; Wed to Thu Light Rain- Sat to Tue Loni Kalbhor, Uruli Kanchan, Yavat, Patas, Supa, BaramatiNarayangaon, Junnar-Drizzling Thu to Thu</td>
<td>Cloudy</td>
<td>08-19</td>
</tr>
<tr>
<td>Solapur</td>
<td>22-23</td>
<td>26-31</td>
<td>Solapur, Nanaj, Kati- Drizzling Fri to Sun &amp; Tue to Thu Light Rain Thu &amp; Mon Vairag, Osmanabad, Tuljapur, Latur, Ausa-Drizzling Thu to Sat &amp; Mon to Tue Light Rain Sun Kasegaon- Drizzling Thu, Sun &amp; Mon Pandharapur, Kari, Atpadi, Pangri, Barshi-Drizzling-Thu to Thu</td>
<td>Cloudy</td>
<td>06-21</td>
</tr>
<tr>
<td>Sangli</td>
<td>22-23</td>
<td>29-32</td>
<td>Sangli, Miraj, Shriguppi,Kagvad, Arag, Shetfal - Drizzling Fri to Thu, Light Rain - Thu Valva, Kavatha Mahankal, Tasgaon, Palus Drizzling- Sun &amp; Mon Palsi Drizzling-Fri to Sun &amp; Tue to Thu Light Rain- Thu &amp; Mon Khanapur, Shirol - Drizzling Thu to Fri &amp; Mon to Thu Moderate Rain -Sat &amp; Sun Kasegaon Vite - Light Rain- Thu &amp; Thu</td>
<td>Partly Cloudy</td>
<td>10-23</td>
</tr>
<tr>
<td>Bijapur</td>
<td>22-23</td>
<td>29-32</td>
<td>Bijapur, Tikota – Drizziling Fr to Thu Light Rain Thu Telsang, Chadchan Drizzling- Thu to Thu</td>
<td>Partly to Mostly Cloudy</td>
<td>11-26</td>
</tr>
<tr>
<td>Hyderabad</td>
<td>22-24</td>
<td>27-29</td>
<td>Hyderabad, Zahirabad, Medchal Drizzling- Thu To Thu</td>
<td>Cloudy</td>
<td>03-18</td>
</tr>
</tbody>
</table>

Note: Above weather information is summary of weather forecasting given in following websites

II. a) Days after pruning:  123 days.

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

Pan evaporation: 3 - 5 mm

Water management

1. All the grape growing regions are forecasted to receive from drizzle to light rains. The irrigation water application should be based upon the growth of the vines. 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 @ 2800 - 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 irrigation should be provided to leach sodium from the soil.
2. If fruit pruning is scheduled in next 15-20 days, test your field soil and irrigation water and plan nutrient management accordingly.
3. In case fruit pruning is planned during mid September, raise Sunnhemp or Dhaincha for green manuring purpose. For sodic soils, growing dhaincha will be beneficial.

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

Nil.

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

1. Rootstock management:
   During this period, the weather is favourable for grafting of commercial variety on rootstock. As per the present weather the temperature is about 30°C while the relative humidity is above 90%. This condition will help for graft success. At the time of grafting, the rootstock must be in sap flow condition. Under the condition of no rainfall, it is advised to irrigate the rootstock plants 4-5 days in advance. Irrigation after the grafting will help to build the relative humidity required for successful grafting.

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

<table>
<thead>
<tr>
<th>Days after pruning</th>
<th>Risk of diseases</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Downy mildew</td>
</tr>
<tr>
<td>123</td>
<td>Moderate</td>
</tr>
</tbody>
</table>

There can be a high incidence of powdery mildew with the rains having stopped in most of the grape growing areas and application of sulphur 80WDG @ 2g/L or dusting of sulphur 80%WG @ 5-6 kg/acre should be done for the control of powdery mildew. Chitosan may be tank mixed with sulphur @ 2g/L. In Nashik region, downy mildew may be incident and hence application of potassium salt of phosphoric acid @2g/l +Mancozeb @2g/L may be done.
VII. Insect and Mite management. (Dr. D.S. Yadav)

- 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.