WEATHER DATA FOR THE PREVAILING WEEK

(Assumption: Fruit Pruning date- 15/09/2019)

I. WEATHER DATA FOR THE PREVAILING WEEK

Thursday (5/3/2020) – Thursday (12/3/2020)

Location	Temperature (°C)		Possibility of Rain	Cloud Cover	Wind Speed (Km/hr) Min-Max	R H%	
	Min	Max				Min	Max
Nashik	14-17	29-33	**Nashik, Dindori, Vani, Palkhed, Ojhar, Pimpalgaon Baswant** Tue & Wed- Drizzling. **Shirdi, Loni** Fri- Drizzling.	Clear to Partly Cloudy	0-26	17-35	68-88
Pune	15-17	30-33	**Pune, Narayangaon, Junnar** Fri- Drizzling.	Clear	0-21	18-31	60-84
Solapur	19-22	34-36	**No Rain.**	Clear	5-15	17-23	49-74
Sangli	16-18	33-35	**No Rain.**	Clear	2-21	16-26	65-87
Bijapur	18-21	34-36	**No Rain.**	Clear	4-19	16-23	49-76
Hyderabad	21-22	33-35	**Hyderabad, Medchal** Sun- Drizzling.	Clear to Partly Cloudy	2-13	30-50	84-99

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: 140+

b) Expected growth stage of the crop: Berry softening/harvesting

III) Nutrient and Irrigation Management (Dr. A K Upadhyay)

Water management

Expected pan evaporation: 6.5 to 8.0 mm

1. From Veraison stage onwards till maturity, apply irrigation through drip @ 11,050 – 11,900 L/ acre/ day for Nasik, Pune and Hyderabad region and 11,900 – 13,600 L/acre/day for Sangli, Solapur and Bijapur region.
2. Remember that if the soil is at field capacity (wapsa) then do not irrigate.
3. Flooding the vineyard is not advised as it will lead to wastage of water. Concentrate irrigation water application in the root zone only.

4. As the temperature is rising, do not withhold water during ripening to harvest stage as this will lead to loose bunch, thereby affecting the quality of produce.
5. The plots which have entered into rest period provide only need based irrigation to protect the existing leaves from drying and also contribute towards increasing the reserves of the vines through photosynthetic activity. The quantum of irrigation water applied should be approx. 4000 – 5000 L/ acre, once in a week. Care should be taken to reduce/stop the water in case new growth is observed on the shoot.

Soil and Nutrient management

Ripening to Harvest stage:

1. Apply Sulphate of potash or 0-0-50 @ 25 kg/ acre in 3-4 splits for next two weeks. Total potassium application (SOP) should be approx. 60 kg/acre during this stage. Follow this up with Magnesium sulphate @ 10 kg/acre in two splits.

Rest period:

1. Apply 10kg Urea, 10 kg DAP and 10 kg Sulphate of Potash/ acre in two splits every 15-20 days.

Foundation pruning:

1. If planning for foundation pruning in next 10- 15 days, it is advised to get soil and water analysed for planning nutrient and water application schedule for foundation pruning season.
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. Mixing of sulphur with FYM/ compost further improves its efficacy.
3. 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.

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

NIL

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

Early harvest vineyard: In the area where fruit harvesting is completed, the vine need to be given rest. During the rest period, need based irrigation and fertilizer are to be supplied so as to help the vine to recoup. Excess irrigation may lead to new growth that will also deplete the storage from vine.

The cultural practices before pruning to be given importance. Trench opening between two vines (2 feet wide and 3 to 4"depth) requires for application of FYM and other major nutrients as per the recommendations. While opening the trench care should be taken that the roots cutting will not exceed 30%. Immediately after trench opening apply FYM and other nutrients and close the trench with soil. Exposure of trench for more time will damage the roots thereby leading to dead wood on cordon.

Rootstock plantation: In newly planted rootstock plants if the roots are established in the soil, there will be new flush of vegetative growth. Under such situation, application of nitrogen at lower dose (0.5kg/acre alternate day) to the plants can be followed. This will encourage for good vegetative growth.

VI. Disease management (Dr. Sujoy Saha)

Days after pruning	Risk of diseases			
	Downy mildew	Powdery mildew	Anthracnose	Others (specify)
140+	Nil	Low	Nil	Nil

An application of *Ampelomyces quisqualis* @5-6g/L or *Bacillus subtilis* @2g/L or Trichoderma formulations @ 4-5g/L may be given to the bunches for control powdery mildew. No chemical should be applied at this stage. For early pruning areas, Trichoderma may be applied via drip irrigation.

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

Days after pruning	Risk of pests			
	Mealybug	Mite	Thrips/leafhopper	Caterpillar
150	High	High	Low	Low to Moderate

- Both mite and mealybug infestation may increase during next week.
- Spot plant wash with trisiloxane polyether surfactant @ 0.3 ml per litre water with 10-12 litre water per plant to remove mealybug and honeydew from plant and bunches in the field.
- Regular water sprays @ 1000 litres per acre to wash leaves to remove dust and mite webbings. Sulphur 80 WDG @ 1.5-2.0 g/L or abamectin 1.9 EC @ 0.75 ml per litre (PHI 30 days) or bifenazate 22.5 SC @ 0.5 ml per litre (PHI 30 days) water may be applied if mite infestation is observed.
- Hand pick and kill caterpillars if found in bunches.
- If the grape berries get damaged due to berry cracking, mechanical damage, micro-cracks, holes made by other insects, etc. at the time of ripening, they may get infested by scavenging fruit flies. All the damaged berries should be removed from the grape bunches. These berries should be destroyed by burying them minimum two feet deep in the ground away from the vineyards. It will reduce the fruit fly population in the vineyard. Ripe banana can act as a good attractant for these scavenging fruit flies. Therefore, banana traps can be made and installed at the rate 5 per acre. To make a banana trap, take a container and put a ripe banana inside it. Pour 2-3 drops of spinosad 45 SC or cyantraniliprole 10 OD on the banana. Cover the mouth of the container with inverted paper-cone keeping a small hole at the bottom for fruit flies to enter. The berry cracking of grapes should be managed by following suitable viticultural practices.

Fruit fly adults on grapes