WEATHER DATA FOR THE PREVAILING WEEK

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

I. WEATHER DATA FOR THE PREVAILING WEEK

Friday (13/3/2020) – Thursday (19/3/2020)

Location	Temperature (°C)		Possibility of Rain	Cloud Cover	Wind Speed (Km/hr)Min-Max	R H%	
	Min	Max				Min	Max
Nashik	14-20	31-37	**No Rain**	Clear	3-22	11-20	33-58
Pune	16-23	34-38	**No Rain**	Clear	1-17	15-21	40-63
Solapur	23-27	36-38	**Osmanabad, Tuljapur, Latur, Ausa** Wed- Drizzling.	Clear	6-21	17-25	38-54
Sangli	19-24	35-38	**Khanapur** Tue, Wed-Drizzling.	Clear to Partly Cloudy	3-15	17-20	61-45
Bijapur	22-25	36-38	**No Rain**	Clear	7-21	20-24	37-55
Hyderabad	21-23	34-36	**No Rain**	Clear to Partly Cloudy	3-13	33-40	74-94

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 Sangli region and 11,900 – 13,600 L/acre/day for Solapur, Hyderabad and Bijapur region.
2. Remember that if the soil is at field capacity (wapsa) then donot 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, donot 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 (Dr. A.K. Upadhyay)

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)

After re-cut: After the rec-cut, the pasting of hydrogen cyanamide was done on 3-4 buds. This has resulted into sprout of all the buds. However, only single healthy and vigorous growing shoot is required for training as trunk. Hence, other shoots are to be remove and single shoot to be retained. While developing the trunk, the growing shoot need to be fast growing. Application of nitrogenous fertilizers are to be supplied at this stage. Urea, ammonium sulphate, 18:46:0 and 12:61:0 grade fertilizers becomes the choice. Sufficient irrigation to the vine that will cover the complete root zone will help in uptake of supplied nutrients. During this stage, thrips incidence and potash deficiency on leaf become confusing. The leaf at growing tip if become crinkled/cupping, thrips incidence will be more prominent whereas the older leaf on a shoot if cupping will have the deficiency of potash. Depending on the symptoms, the corrective measures are to be taken.

Old vineyard: In coloured varieties, early foundation pruning is initiated for fruit bud differentiation. Some of the major cultural practices followed during this period is opening of trench and application of fertilizers including FYM. Trench between vines of 3 to 4 inch depth

and two feet wide is done. While opening a trench, care to be taken that more than 30% roots are not exposed. Immediately after the trench opening, application of FYM and recommended fertilizers are to be applied and the trench to be closed. This will help to avoid dead arm of cordon.

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