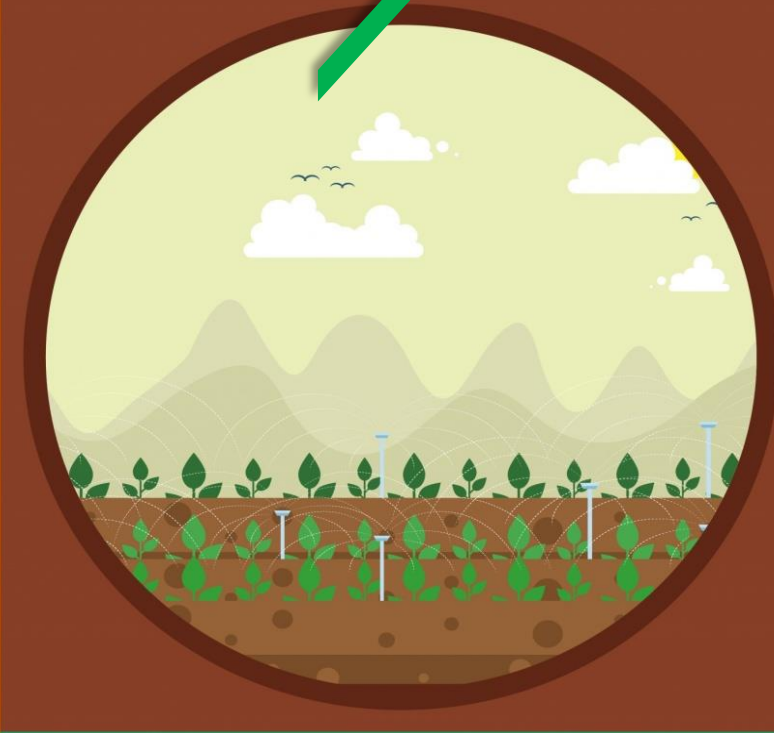




Agro-Advisory for the State of Maharashtra

January 22- February 04, 2021



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Agro-Advisory for the State of Maharashtra for 22 January-04 February, 2021

Advisory No. NIASM/MH/21-03

Date: January 21, 2021

1. Weather Forecast Summary for 22 January-04 February, 2021 (As per IMD, New Delhi)

- Maximum temperature may vary between 28-30 °C, remaining 1- 4 °C below normal in most parts of the state.
- Minimum temperature may vary between 11-16 °C, remaining up to 3 °C below normal in most parts of the state , except in central part of Madhya Maharashtra in the second week, where it may remain up to 2 °C above normal.

2. Agro-advisory for the period 22 January-04 February, 2021

2.1. Crop Management

- Intercultural operations should be carried out on time to keep the crops weed free.
- Irrigation should be given at critical crop development stages for better yield.
- Matured **pigeon pea** crops should be harvested by cutting the crop followed by drying, threshing and ensuring their safe storage.
- Farmers planning for **summer ground nut** should carry out field preparation and sowing @ 100-120 kg seeds ha⁻¹. Seed treatment with 4 g Trichoderma per kg seed followed by 50 g Rhizobium and 25 g of PSB is recommended prior to sowing.
- Continue irrigation in **sweet orange** and **acid lime** orchards @ 17-20 L per plant per day for *ambia bahar*. Prune the trees for skirting, opening up and for removing infected branches.
- In **dragon fruit** complete heavy pruning operations for canopy management before temperature starts rising.
- In **custard apple**, complete heavy pruning for opening up of the trees.

2.2. Managing Atmospheric Stresses

- To avoid berry cracking and pink berry formation in vineyards a) maintain side covers up to trellises height, which can block wind breeze, b) cover bunches with paper bags and c) avoid moisture stress (excess/ deficit).

2.3. Managing Soil Stresses

- Practice mulching in orchards to keep the bunds/ basins moistened, to reduce the salinity build up at root zone and for enhanced white root development.
- Apply 10 tons of compost at the time of field preparation for sowing vegetables such as chili, capsicum etc. and basal dose of N: P: K should be applied at the time of sowing. The basal dose of N: P: K for chili is 30:80:80.
- Apply 10 kg urea in spinach and fenugreek with irrigation after first cutting to improve regrowth of these crops.
- After harvesting of sugarcane don't burn trash for cleaning fields. Use bio decomposers for converting trash into manure in short period of time and for sugarcane ratoon management SORF machine may be employed.

- Start field preparation for sugarcane sowing in the field. Apply 12 t ha⁻¹ of fully mature FYM or 20 t ha⁻¹ of compost or 35 t ha⁻¹ of press mud in the field and then plough the soil for proper mixing. If soil is deficient in Sulphur and sodic in nature the apply 500 kg of Gypsum/ha at the time of ploughing.

2.4. Managing Biotic Stresses

- Spray wettable sulphur @ 0.2% for management of powdery mildew and zineb @ 0.2% for anthracnose management and Azadirachtin 1% @ 1ml L⁻¹ to control **hopper infestation** in mango.
- Spray of Deltamethrin 2.8 EC 0.5 ml L⁻¹ water can control both **hopper and aphid** infestation in mango.
- For management of **sapota leaf spot** spray Carbendzim @ 0.1%.
- To control **aphid** in safflower spray the crop with Dimethoate 30 EC @ 2 ml L⁻¹ of water.
- To control **pod borer** in chick pea: set up heli lure and Spodo lure pheromone traps at 8 traps/acre. Spray the crop with Flubendiamide 480 SC at 0.5 ml L⁻¹ of water.
- **Fall Armyworm (FAW)** in maize: Erect 8 pheromone traps/acre. Spray the crop with Azadirachtin at weekly interval at 3 ml L⁻¹ of water. Under severe condition spray the crop with Emamectin benzoate at 0.2 g L⁻¹ or Spinetoram 11.7% SC 2 ml L⁻¹ of water.

2.5. Managing stresses in Animals

2.5.1. Livestock

- To protect animals from cold during the night hours, keep the animals in a protected area particularly in high altitude region.
- Feed animals with sufficient quantity of dry and green fodder to maintain the milk production of the dairy animals.
- Keep the floor of the animal shed clean and dry.
- The sidewalls of the animal shed to be half covered to protect the animals from cold winds.
- To protect the new born calves from cold, provide straw/hay bedding to young calves, keep the bedding material dry and change regularly.
- Provide mineral mixture 30-40 g/day to cattle for improving the production and reproduction efficiency.
- Haemorrhagic Septicaemia (HS) is most likely to occur in Nashik district and having high risk at Ahmednagar district. There is very high risk of Foot and Mouth disease (FMD) in Nashik district and high risk in Ahmednagar district.
- There is very high risk of Peste des Petits Ruminants (PPR) in five districts of Maharashtra; Ahmednagar, Dhule, Nanded, Nandurbar and Nashik and moderate risk in Osmanabad district. Vaccination for HS, FMD and PPR (animals above 3 month of age) may be done in consultation with the local veterinarians and as decided by state animal husbandry authorities.
- There is very high risk of Sheep and Goat pox in Sangli and Nashik districts whereas Yavatmal district is having high risk. Enterotoxaemia (ET) is having very high risk in Satara district. Vaccination may be done in consultation with the local veterinarians.
- Theileriosis is having very high risk at Sangli and Nashik districts and Trypanosomiasis is having high risk in Mumbai region. Use acaricides to control ticks, after consultation with local Veterinarian. Remove cracks and crevices by roughcasting and smoothing of the outer and inner surfaces of the cattle buildings for endophilic tick species (this control option is expensive but leads to the eradication of the parasite from the farm).

2.5.2. Fisheries

- During winter season, the temperature of water at surface is cooler than that at the bottom and fish prefers bottom layer, hence it is recommended to maintain the water level up to 6-7 feet.
- During winter season, the length of the day and intensity of the light decreases, the dissolved oxygen (DO) depletes due to reduced photosynthetic activity, hence it is recommended to maintain DO by adding fresh water or by using aerators.
- Generally, in colder season feed intake of the fish is reduced due to reduced temperature and the digestive systems of the fish shrinks, hence it is recommended that feeding of the fish should be reduced by 50-75 % and even can be stopped in case of severe cold.
- Feed fish with low protein diet in cool season.
- Farmers are suggested not to use organic manure viz. cow dung, poultry droppings, and pig dung in the pond.
- During winter, the chance of microbial infection are more, hence recommended to treat pond water with potassium permanganate @ 2.5-5 kg ha⁻¹ or limestone @ 125-250 kg ha⁻¹ and salt @ 250 kg ha⁻¹.

3. COVID 19 - Precautionary measures for agricultural activities

3.1. General advisory as per Ministry of Agriculture, Govt. of India

- As with passing day more and more relaxation has been provided from Government side, more care needs to be taken particularly social distancing and avoiding contacts with outsiders with unknown history or persons migrated from red zone.
- In manual field operations of harvesting/picking, accomplish the operation in 4-5 feet spaced strips assigning one strip to one person.
- Stagger the field operations wherever possible and avoid engaging more number of persons on the same day.
- Prefer mechanized operations over the manual wherever feasible.
- All machines should be sanitized at the entry point and at regular intervals.
- All transport vehicles, gunny bags or other packaging material should be sanitized.

3.2. Livestock and Poultry

- Wash hands with soap and water before and after milking of lactating animals and clean the utensils thoroughly.
- Don't allow visitors to enter animal premises and use mask and maintain social distancing while distribution/sell of milk.
- Use of hand sanitizer or washing hands frequently need to be practiced routinely while carrying out various day to day operations.
- All the bio-security measures need to be followed strictly in the poultry farms.

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