



AGROMET ADVISORY BULLETIN

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55) Weather based Agromet Advisory committee meeting dated 08.10.2024

District: Nashik

Last Week Weather Summary (02.10.2024 to 08.10.2024)							Weather Parameters	Weather Forecast (09.10.2024 to 13.10.2024)				
02	03	04	05	06	07	08	Date	09	10	11	12	13
0.0	0.6	0.0	0.0	0.0	3.5	0.0	Rainfall (mm)	8	7	15	10	3
31.5	30.5	30.9	29.8	30.3	30.0	32.2	Max. Temp. (°C)	33	33	34	34	34
22.0	22.0	22.0	21.0	21.5	20.0	21.1	Min. Temp. (°C)	22	22	23	23	23
P Cloud	P Cloud	P Cloud	P Cloud	P Cloud	P Cloud	P Cloud	Cloud Cover	P Cloud	P Cloud	Cloudy	Cloudy	Cloudy
84	89	86	85	86	85	74	Max. RH (%)	72	73	76	79	78
70	70	64	65	71	60	62	Min. RH (%)	52	57	55	51	50
1.5	2.8	3.2	2.7	3.1	4.8	3.8	Wind Speed (km/hr)	9	6	11	8	11

Agromet Advisory Based on Weather Forecast Prediction

Crop	Stage	Advisory
Weather Summary		Considering to the five days weather forecast there is possibility of light to moderate rainfall from 9 th to 13 th October 2024 also slightly hot & humid weather for next five days. The sky will be partial cloudy to cloudy for next five days. Also Maximum Temperature staying in between 33-34 Degree Celsius, Minimum Temperature 22-23 Degree Celsius & the wind speed will remain between 6-11 kmph for the next five days.
<u>Weather Alerts/ warning:</u>		<u>Considering the forecast & warning there is a possibility of thunderstorm with lightning, light to moderate & gust wind (30-40 speed kmph) on October 08 & 10, 2024 (Yellow alert) at isolated places of Nashik district. (Based on the District Level Forecast and warning issued by RMC Mumbai on issued on 08.10.2024).</u>
General Advisory		Use Meghdoot mobile app for weather based crop advisory and Damini mobile app for rain or hail or thunderstorm with lightning prediction. The green gram should be threshed after they are well dried on the threshing yard. Black Gram: After harvesting sun drying of pods to remove moisture. Grains get separated by beating the pods and sun dried for 4 -5 days. Store in cool and dry place. If possible, apply 1% karanj or castor oil or mix 5% leaves of neem and store it to protect from store grain pests. Brinjal, Chilli, Tomatoes should be harvested in Kharif season. Cabbage and cauliflower crops should be harvested. Vine vegetable crop should be harvested. Okra and cluster bean crops should be harvested. Pest and disease control measures should be taken on all kharif vegetable crops.
SMS Advisory		Considering Alerts/ warning forecast (Dt. 06 & 10 October 2024), protect the livestock, poultry and yourself from thunderstorm with lightning & Also cover harvested and threshed kharif crops in safe place due to light to moderate rains.
Kharif Paddy	Flowering to milking stage / Panicle growth	Rogue out the weedy rice from field of paddy at the time of flowering in order to avoid shattering of grains and further dissemination to clean plots. Due to continuous falling rainfall, the climate becomes more favorable for the incidence of bacterial blight disease. For disease control, undertake the spraying of copper oxychloride (COC) 30 gm + streptomycin 6 gm per 10 liters of water. For control of blight disease on rice crop, Propiconazole 1 ml or Carbendazim 1 gm per liter of water should be sprayed. Spray by mixing sticker 0.1% (viscosity, 1 ml/g per liter). Maintain the water level up to 5-10 cm during the flowering to boot stage. Maintain the water level up to 10-15 cm during panicle formation.



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Finger millet	Flowering to milking stage	<p>The ragi / finger millet crop is grown on rain water. Considering the forecast for the next five days, in view of the possibility of interruption in the rains, protected irrigation should be given as per the availability.</p> <p>Rogue out the finger millet crop at the time of flowering stage.</p>
Niger	Flowering stage	<p>If the Niger crop is in flowering stage, do not spray the insecticide.</p> <p>To get more production of Niger crop, it is recommended to use one bee artificial hive per acre for insect pollination in the Niger crop.</p>
Kharif Pearl millet	Harvesting	<p>Harvesting of <i>Kharif</i> Bajara (Pearl millet) crop should be completed at physiological maturity stage. For this the panicle of the stem should be cut with a sickle and collected and threshed after dried.</p> <p>Threshing should be done as early as possible in <i>Kharif</i> Pearl Millet crop with the help of a Threshing machine.</p>
Kharif Maize	Harvesting	<p>Harvesting of <i>Kharif</i> maize crop should be completed at physiological maturity stage.</p> <p>The corn should be harvested after the grains turn yellow and become hard. These corns should be dried well in the sun for two to three days. After that, the outer covering of the maize should be removed and the grains should be separated from the maize with the help of Maka Solani Yantra (an improved implement developed by M.P.K.V. Rahuri). The grains should be winnowed to separate the white husks and pieces of bitti. The seeds should be dried well in the sun and stored keeping the moisture content of the seeds up to 12 percent.</p>
Soybean	Maturity stage / Harvesting	<p>Harvesting of early maturing varieties</p> <p>In early maturing soybean varieties, the crop can be harvested when 90 percent of the pods turn yellow. This does not adversely affect seed germination.</p> <p>Where the crop has matured, continuous rainfall can reduce soybean quality. Legumes are also prone to germinating seeds. In such cases, the crop should be harvested at the right time to avoid damage due to cracking of pods or sprouting of seeds.</p> <p>Harvesting and threshing should be done after crop maturity. Harvesting should be done by cutting the plants with sickle then collect, sun dry or protect it from falling rain and make hip & cover it by tarpaulin at threshing yard. While threshing, the speed of threshing machine shaft should be 300 to 400 rpm. So there will be no adverse effect on soybean germination.</p>
Cotton	Ball formation to Ball maturity	<p>For the control of pink bollworm on cotton crop, in this fortnight, apply 2 pheromone traps per acre should be set at 1 feet height of the crop. Spray 5% Neem ark should be given at flowering stage of crop. Similarly spray Thiodicarb 75 wp@ 20 gm OR Profenofos 50 EC@ 20 ml OR Quinalphos 20 EC@ 20 ml per 10 lit. of water.</p> <p>Square and Boll drop</p> <p>Reasons</p> <ul style="list-style-type: none">Increased or decreased rainfall or fluctuations in temperatureCrop competition for nutrients during the growing stageInsect infestationWaterlogging in the field or loss of soil moistureCrop competition for sunlight <p>Measures</p> <ul style="list-style-type: none">Adequate food and water management in contingent situations.Integrated Nutrient Management.Naphthyl Acetic Acid (NAA) 20 ppm spraying in quantity.Growth control and topping.Spraying of potassium nitrate as 1 percent. <p>Management should be done in the crop so that there is plenty of air and sunlight. The first picking should be done after 20 to 30 percent of the bolls in the crop have burst. After that, the second and third picking should be done at an interval of 15 to 20 days respectively.</p> <p>After picking the cotton, all the stalks should be uprooted and taken out of the field and used to make compost. So that the insect stages are destroyed.</p>



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Groundnut	Pod formation to Crop maturity / harvesting stage	Harvest summer Groundnut crop at physiological maturity stage. When groundnut is harvested, if there is sufficient moisture in the soil, the groundnut vine plants can be uprooted along with the pods. However, if the land is hard, bullock-operated (Digger) or tractor-operated (groundnut harvester) implements can be used.
Gram		In rainfed/ non irrigated areas where there is no facility of irrigation, sowing should be done between 20 th September to 10 th October before the moisture in the soil decreases. For this mainly Vijay, Digvijaya Phule Vikram and Phule Vishwaraj varieties should be used. Planting of irrigated gram crop between 20 th October to 10 th November gives good yield. Sowing of Kabuli gram should be done only if there is facility of irrigation. Among indigenous gram, Vijay, Vishal, Digvijay, Phule Vikram and Phule Vishwaraj are wilting disease resistant varieties, suitable for irrigated, rainfed and late sowing condition and among Kabuli gram, Virat, PKV-2 (Kak-2), PKV-4 and Krupa are suitable for more production/yield. Seed treatment: Bavistin@ 2 gm + Thirum@ 2 gm per kg of seed and apply 25 gm of Rhizobium culture per kg of seed through cold solution of jaggery.
Grapes		<u>Bunch rotting and Downy Mildew problems</u> In many gardens, problems with Bunch rotting and downy mildew appear in the pre-bloom stage after pruning. After pruning in the garden we apply hydrogen cyanamide pasting on about four to five buds on each vine. The buds are well puffy due to the use of Ethephon. So all the buds burst out. After this the cluster is clearly visible in the five-leaf stage. This stage usually appears after the fourteenth day after pruning. During this period, priority is given to removing fail shoots. If there has been heavy rainfall during this growth stage, the humidity in the garden suddenly increases. Rain during the pre-bloom stage can increase humidity in this small canopy. The roots in the two rows are activated by rain. Due to the increased production of auxins by the roots, internal gibberellin increases in the vine. As a result, vines become weak with increased leaf flexibility. Clusters in the pre-bloom stage is prone to rot if water droplets accumulate. Often after a night's rain, whole bunches can be seen rotting in the garden in the morning. In many gardens, grass also grows more during rainy season. After rains, this grass keeps moisture in the soil for a long time. The distance from the cross to the ground is short. Even air does not play in cloudy weather. Both of these things increase the humidity. This is a incidence ground for downy mildew. This situation is especially evident in areas with dense canopy. Canopy needs attention to reduce the incidence of bunch rotting and downy mildew. The following measures will be important in this regard: As soon as bunches are clearly visible, the side shoots should be removed immediately. Spray the vines with zinc and boron each at 0.5 gm per liter of water. Potash (0-0-50) 1 gram per liter of water should be sprayed. This will help in strengthening the vine. Apply a small amount of a Cytokinin-containing fungicide. In case of heavy rainfall, cross or the trunk cut with a knife. It helps to increase the level of Cytokinin.
Pomegranate		<u>Hasta Bahar</u> <u>Disease management</u> Apply a spray of freshly prepared 1 percent Bordeaux mixture immediately after leaf fall. Salicylic acid 0.3 gm and micronutrient mixture 2 gm per liter of water should be given four sprays each at an interval of one month before flowering. Bordeaux mixture 0.5 per cent or copper oxychloride (50 WP) 2.5 gm or copper hydroxide (53.8 DF) 1.5-2 gm + sticker spreader 0.5 ml per liter of water: in addition to 2-bromo, 2 - Nitropropane-1, 3 diol (Bronopol 95.8 DF) 0.5 gm per liter of water as spray at 10 days interval. If the garden is already infested with oily spot, spray kasugamycin 2 ml per liter of water once a month with Bronopol at an interval of 7-10 days. Avoid spraying more than necessary. If it has rained, spray Kasugamycin + copper fungicide immediately. Depending on the prevalence of fungal diseases in the garden, copper based fungicides should be replaced with suitable fungicides.



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Mango	<p><u>Revival of an old mango orchard</u> <u>Care to be taken after pruning</u> The cut branches should be collected immediately and taken out of the garden to clean the garden. After completion of pruning, apply Chlorpyrifos 5 ml on the cut branches as well as on the whole trunk. Mix per liter of water and spray. Carbendazim 10 gm per liter should be applied with a brush on the cut area. The pruned tree should be given 150 to 200 liters of water two to three times at an interval of 10 to 15 days.</p>
Onion (Late kharif)	<p>The first week of fertilizer should be applied after the onion crop is one month old. For weed control in the nursery of Rabi onion crop, chemical herbicide should be sprayed 21 days after planting. At the time of spraying, care should be taken that there should be a return condition in the field.</p>
Tomato	<p><u>Rabi Tomato Nursery</u> During the rabi season, seedlings are prepared in the nursery from September to October and transplanted in the month of October to November. Generally 160 grams of seed per acre for straight varieties and 50 grams for hybrid varieties is sufficient. Apply Thirum or Captan 3 g or Trichoderma 2.5 g per kg of seed. Then apply Azotobacter 2.5 g per kg of seed. Generally 1.2 bunches of seedlings are sufficient for planting on 1 acre area. The land of the nursery should be well plowed horizontally and vertically and two hoeing should be given. Then 3 meters long, 1 meter wide and 15 cm. Height beds should be prepared.</p>
Animal Husbandry (Cow, Goat etc) Animal Husbandry (Cow, Goat etc)	<p>In the second week of this month, a multi-purpose dewormer should be administered with the help of a veterinarian to eliminate internal and external parasites. Animal feed should be increased by including energy and protein rich animal feed. With the onset of cold, respiratory diseases are likely to occur, so care should be taken especially in young calves. Protect Goat from light to moderate rains and lightning and avoid taking them out for grazing or other reasons. Lime should be used to keep the animal shed dry. Keep animals away from tractors and other metal farm equipment. Don't allow your animals to congregate under trees. Watch your animals closely and try to keep them under your direct control. Considering the thunderstorm forecast it is advised to keep animals away from open water, pond or river. Stored fodder & feed of livestock and poultry should be protected from rain by covering with plastic/tarpaulin. Keep milch animals indoors.</p>
Goat	<p><u>Management in goats in September and October</u> The buck should be kept separate and away from the goat shed. Proper breeding records should be maintained. Breeding females should be checked for parasites and dewormed as necessary. The overgrown hooves of goats should be cut.</p>
Sheep	<p><u>Management of sheep in October</u> Deworming should be done after checking manure samples. Males that are useless for breeding should be castrated. Change the soil layer in the sheep shed. Sheep should be washed with insecticide solution to prevent ectoparasites. Sheep should be sheared. Useless sheep should be removed from the flock and sold. Protect the sheep in the flock from changing weather (mainly morning and evening).</p>



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Poultry	Health Management	<p>Stress in chickens</p> <p>Sudden climate change can stress and weaken immunity and make chickens susceptible to other diseases.</p> <p>Stress can occur if the hens are not eating enough feed due to stress caused by different types of feed, lack of sufficient nutrients in the home diet or other factors.</p> <p>Events such as weight gain, shedding, or aging can cause stress.</p> <p>Chickens experience emotional stress when they are caught, given certain drugs or transported from one place to another.</p> <p>Stress can also be caused due to the drugs given to cure the disease and due to the duration of the disease.</p> <p>Measures</p> <p>Determine the total number of chickens based on the space you have available by looking at how much space each chicken needs to reduce or eliminate stress among the chickens.</p> <p>Overcrowding in small spaces increases the amount of ammonia in the atmosphere. Moreover, since the birds are in close proximity to each other, the disease spreads quickly. As a solution to this, litter should be kept clean.</p> <p>Litter should be kept dry during rainy season and high humidity. According to changes in the environment, curtains should be placed in the shed, sacks should be taken care of on time.</p> <p>Anti-depressants should be given on the advice of a specialist. A supply of vitamins through diet or water reduces stress.</p> <p>Do not vaccinate during stress. First reduce the stress on the chickens and then vaccinate them.</p>
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Source:

- 1) Weather Forecast : Research Section, Mumbai
- 2) Last week weather summary : GKMS Observatory, ZARS, Igatpuri, Dist. Nashik.

Place : ZARS, Igatpuri

Date : 08.10.2024

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