Agromet Advisory Bulletin for the District, Malappuram

(Valid from 06.04.2024 to 10.04.2024)

(Issued jointly by Kerala Agricultural University Regional Agricultural Research Station Pilicode& India Meteorological Department)

Bulletin Number:Pilicode/Mpm-28/2024	**Date:05/04/2024**

A. Weather Summary of preceding four days

Rainfall, mm	Max. temp., ºC	Min. temp., ºC	R. H., %	Wind speed, Km/h
0.0	35.1 – 35.6	26.8 – 27.9	61 – 75	04 - 18

B.Weather forecast for next five days

Parameters	06-04-2024	07-04-2024	08-04-2024	09-04-2024	10-04-2024
Average Rainfall, mm	0	0	0	0	3
Max. Temp, ºC	36	36	36	36	36
Min. Temp,ºC	27	27	27	27	27
Max. Relative Humidity, %	73	73	73	73	73
Min. Relative Humidity, %	61	61	61	61	61
Wind speed,km/h	4	3	2	2	2
Wind direction, degrees	270	270	270	270	270
Total cloud cover, octa	4	7	4	4	8

C. Agrometeorological Advisories

Crop	Stages	Problems	Agro-meteorological advisories
General conditions	**No rain ****		
	No rainfall. Temperatures will be higher during the day. Atmospheric humidity will be normal.		
General Recommendations	Mulch the crop basins. Irrigate the crop when the water is available in the evening or early morning. Adopt drip irrigation method for maximum water use efficiency. 1. Arrange for irrigation facilities from available water resources. 2. Remove weeds from the soil to reduce transpiration losses. Powder the soil to dust by breaking the clods. This will act as good soil mulch to prevent evaporation loss of water. 3. Well drained areas where lifesaving irrigation possible ragi and millets cause cultivated. 4. Take care of controlling of sucking pests; control/minimize the insect and pest incidence with IPM.		

	5. Repair and rejuvenate local water bodies before the rainy season.		
Various crops	Various stages	Sucking pests  The climate is favourable for the spread of sucking pests like mealy bug, jasids, aphids, mites, bugs etc. If not controlled properly they will act as vectors and may spread virus diseases.	To control the pests apply neem oil emulsion (5 ml. neem oil mixed in one litre of luke warm soap water solution) Or Apply malathion 50 EC @ 2 ml + neem oil 4ml per litre of water
Coconut	All stages	Drought Management	1) Cut two green leaves from the bottom layer, to reduce the water loss from the tree. 2) Apply compost/dried leaves in the basins to increase water holding capacity. 3) Adopt drip irrigation. This will minimize the irrigation water loss. Take care of controlling of sucking pests; control/minimize the insect and pest incidence with IPM.
Coconut	Various stages	Leaf eating caterpillar 	The season is congenial for the spread of leaf eating caterpillars in coastal areas. Cut and burn the affected leaves. Release larval parasitoids, *Goniozus nephantidis*, @10 nos/palm (4-6 release) on the trunk

Black pepper	Different stages	Wilting due to drought 	Protect the plants from direct sunlight by smothering the basal portions of the vines with dried banana leaves, plated coconut leaves etc.. Give protective irrigations one in every two weeks.
Cucurbitaceous vegetables	All stages	Downy mildew 	Downy mildew: As a prophylactic measure apply 'Mancozeb'(@ 2g/l of water). If disease appeared, spray Akomin® (@3ml/L) on both surfaces of the leaves, thrice at 15 days intervals.
Poultry and pet birds	Different stages	Summer stress 	To combat heat stress, the poultry sheds should be protected from direct sunlight, roofing can be painted white to reflect heat, fans can be fitted, cool water can be sprayed, plenty of clean water can be provided with ice, glucose and 0.1 % sodium bicarbonate, feed offered during the cooler parts of the day can be supplemented with 20% extra vitamins, phosphorous and vitamin C.
Animal Husbandry	All stages	Summer Stress 	The rise in temperature will affect the thermoregulatory mechanism of dairy cattle. This will cause increase in body temperature, rapid shallow breathing, increased heart rate, profuse salivation, and reduced feed intake. This in turn results in severe production loss and reduced breeding efficiency in dairy cattle. Provide pure drinking water to the dairy cattle (45 to 60 litres of water), Allow grazing only during the cooler parts of the day. Provide shading. Shelter them in thatched roofings of minimum 9 ft. height with ample ventilation. Providing fans, misting and fogging assembly in cattle sheds will help them to regulate body temperature. Also ensure minerals fortified feeds.

Cow	Milking	Summer Mastitis 	Summer Mastitis is a bacterial disease. The disease is common on cows which are sheltered in unhygienic conditions. The disease is transmitted by insects like flies and mosquitoes. **Symptoms:-** The symptoms are change in composition of milk and turning the milk into an yellow watery liquid , severe fever, lack of appetite, abortions etc. If not treated the cow may lose its milk yielding capacity permanently. Also the cow may lose mobility and gradually death may occur. **Control:-** Ensure hygiene cattle shed and surroundings to control the pathogen and the vectors. Boost the immunity of cattle by supplementing feeds with vitamins and minerals containing health tonics. If disease appears, immediately give medication under the supervision of a Veterinary doctor.
Live stock	Ingestion of poisonous shrubs and leaves	During summer, due to shortage in availability of grasses and green leaves, the cattle may accidentally ingest poisonous shrubs and leaves. The commonly found poisonous plants in north Kerala are Rubber, Green bamboo, Aanathottavadi, Chelamaram, Kozhuppa, Arali, Kunnikkuru, Erikku and Avanakku. Difficulty in breathing, fast deep breathes, lack of appetite, lethargy, muscle cramps, shivering, paralysis, pupil dilation, bloat are some of the common toxicity symptoms. Immediately approach a veterinary care centre. Otherwise prepare and administer universal antidote as a first aid. The antidote can be prepared by mixing Activated charcoal (2 parts) + Magnesium oxide (2 parts) + Tannic acid (1 part) +Kaolin (1part). The recommended dose is 250g for cattle, 30g for calves and 15g for goats and pigs, two to three times in a day. The antidotes should be followed by a saline purgative (450g of magnesium sulfate for cattle and for others in proportion to their body weight) in drinking water.	

***** Warning colour codes of rainfall (for disaster management)***

Warning (Take actions)	**Alert (Be prepared)**	**Watch (Be updated)**	**No warning (No actions)**

Sd/-
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