



Agromet Advisory Bulletin

Date : 12-01-2024

Weather Forecast of District NAGPUR(Maharashtra) Issued On : 2024-01-12(Valid Till 08:30 IST of the next 5 days)

Parameter	2024-01-13	2024-01-14	2024-01-15	2024-01-16	2024-01-17
Rainfall(mm)	0.0	0.0	0.0	0.0	0.0
Tmax(°C)	29.4	29.9	30.3	30.7	30.8
Tmin(°C)	16.5	16.2	15.0	14.7	14.8
RH-I(%)	78	76	75	73	71
RH-II(%)	54	53	51	52	50
Wind Speed(kmph)	5	5	5	5	5
Wind Direction(Degree)	36	56	31	63	58
Cloud Cover(Octa)	2	2	2	2	2

Weather Summary/Alert:

• In Nagpur district, as per the district level value added forecast given by, IMD, RMC, Nagpur, sky will be clear to partly cloudy during next five days i.e., 13th to 17th, January, 2024. • Weather is very likely to be dry on 13th, 14th, 15th, 16th and 17th, January, 2024. • Maximum temperature will be in the range from 29.4 to 30.8 degree Celsius whereas minimum temperature will be in the range from 14.7 to 16.5 degree Celsius. • Morning relative humidity will be in the range of 71.0 to 78.0 per cent whereas afternoon relative humidity will be in the range from 50.0 to 54.0 per cent. • No large change in maximum temperature during next 5 days over the Vidarbha. • Minimum temperature falls by 2-3 degree Celsius during next 3 days thereafter no large change over the Vidarbha.

General Advisory:

• Considering the dry weather forecast for next 5 days it is advised to continue the harvesting and threshing of matured pigeon pea and other crops. • In view of the expected fall in minimum temperature, seasonal, fruits and vegetable crops should be irrigated lightly by drip irrigation/sprinkler irrigation method to reduce the cold injury at critical growth stages. • Crops should be mulched for orchards and vegetable crops, so that it helps to increase the temperature of the soil and conserve soil moisture. • It is advised for farmers to carry out the remaining picking of cotton and terminate the crop after last picking to avoid PBW attack in next season. Collect and destroy the boll rot and diseased crop debris outside the field. • It is advised to continue the agrochemical spraying operations, inter-cultural operations and fertilizer application in standing crops. • For integrated management of Gram Pod Borer 20 bird perches per hectare should be installed up in the field. For control of gram pod borer install pheromone traps (Hexalure) two per acre or five per hectare. If eight to ten moths are found in the trap for three consecutive days, recommended management measures should be taken. In case of pest infestation by observing the crop or when the crop is in 40 to 50 % flowering stage, preference should be given to botanicals or biological pesticides. For this, first spraying should be taken of neem extract 5% or Azadirachtin 300 ppm 50 ml per 10 liters of water with Knapsack sprayer pump. If spraying should be done with a power sprayer, apply three times the amount of pesticide. If Gram Pod Borer has reached the ETL, spraying should be done with Quinalphos 25 % EC 20 ml or Emamectin benzoate 5 % SG 3 gm or Flubendiamide 20 % WG 5 gm or Chlorantraniliprole 18.5 SC 2.5 ml per 10 liters of water. At Wafsa condition hoeing and weeding must be carried out twice; first at 20 and second at 30 days old plants to ensure weed free environment during the critical period of crop.

SMS Advisory:

• Irrigate the crop as per crop requirement with the sprinkler irrigation system possibly and care should be taken that the irrigation water does not accumulate in the crop field.

Crop Specific Advisory:

Crop (Stage)	Crop Specific Advisory
GROUNDNUT	If irrigation water is available, summer groundnut should be sown in the second fortnight of January under Broad bed furrow system and sprinkler irrigation system should be used. Use 125 kg seed per hectare of TAG-24 or SB-11 variety. Seed treatment of Trichoderma 5 gm, Rhizobium 25 gm, and PSB 25 gm should be done per kg of seed. In summer season groundnut variety TAG-24 should be sown at 30 x 10 cm and SB-11 at 30 x 15 or 45 x 10 cm for sowing.

Crop (Stage)	Crop Specific Advisory
PIGEON PEA (RED GRAM/ARHAR)	<ul style="list-style-type: none"> • Complete the harvesting of matured pigeon pea crop and store the harvested and threshed produced in safe and dry places.
BENGAL GRAM/ CHICK PEA	<ul style="list-style-type: none"> • For optimum yield in gram crop, the first irrigation should be given 30 to 40 days after sowing i.e. when the crop is in flowering stage and the second irrigation should be given 60 to 70 days after sowing i.e. in the pod filling stage. • To prevent the occurrence of wilt disease in gram crop avoid excess irrigation to avoid water stagnation in crop field and drenching of Trichoderma biological fungicide mixed with 40 grams per 10 liters of water should be sprayed or drenched or thiophanate methyl 70 WP 25 grams mix with 10 liters of water should be sprayed. • For integrated management of Gram Pod Borer 20 bird perches per hectare should be installed up in the field. For control of gram pod borer install pheromone traps (Hexalure) two per acre or five per hectare. If eight to ten moths are found in the trap for three consecutive days, recommended management measures should be taken. In case of pest infestation by observing the crop or when the crop is in 40 to 50 % flowering stage, preference should be given to botanicals or biological pesticides. For this, first spraying should be taken of neem extract 5% or Azadirachtin 300 ppm 50 ml per 10 liters of water with Knapsack sprayer pump. If spraying should be done with a power sprayer, apply three times the amount of pesticide. If Gram Pod Borer has reached the ETL, spraying should be done with Quinalphos 25 % EC 20 ml or Emamectin benzoate 5 % SG 3 gm or Flubendiamide 20 % WG 5 gm or Chlorantraniliprole 18.5 SC 2.5 ml per 10 liters of water. At Wafsa condition hoeing and weeding must be carried out twice; first at 20 and second at 30 days old plants to ensure weed free environment during the critical period of crop weed competition for better water and nutrient use efficiency.
WHEAT	<ul style="list-style-type: none"> • Wheat crop should be irrigated first at 18 to 20 days after sowing at crown root initiation stage. Water stress at CRI stage reduces production by up to 33 %. • Considering the availability of limited irrigation for wheat crop, irrigate 42 days after sowing if single irrigation is available, irrigate at 21 and 65 days after sowing if two irrigation is available, and if three irrigation available irrigate at 21, 42 and 65 days after sowing. • Under the availability of adequate irrigation facility, first irrigation should be applied at crown root initiation stage (18-20 days after sowing), second irrigation should be applied at maximum tillering stage (30 to 35 days after sowing), third irrigation should be applied at late jointing stage (45 to 50 days after sowing), fourth irrigation should be applied at the flowering stage (65 to 70 days after sowing), the fifth irrigation should be applied at the milky stage of the grain (80 to 85 days after sowing) to the wheat crop.
WHEAT	<ul style="list-style-type: none"> • In case of infestation of aphids in wheat crop is noticed due to cloudy weather, spray with Thiamethoxam 25% WG @ 10 to 15 gm or Quinalphos 25 % EC 40 ml per 10 liters of water for management. In wheat crop due to cloudy weather, in case of infestation of rust and leaf blight disease is noticed spraying should be done with Mancozeb 75 % WP @ 20 to 25 gm per 10 liters of water. Toxic bait should be used for rat management in wheat crop. To make a poisonous bait, mix 49 parts of cereal flour, a little bit of edible oil and 1 part of bromadiolone 0.25 % CB. Spoon the bait into a plastic bag and place it in a live field bin or near the bin.
MUSTARD	<ul style="list-style-type: none"> • Cloudy weather and lowering night temperature favours aphid incidence in mustard. For control of aphid incidence undertake spray of Thiometon 25 EC 8 ml per 10 lit of water or Dimethoate 30 EC 10 ml per 10 lit of water. Undertake need based irrigation for higher productivity in mustard. In case of availability of one irrigation schedule it at flowering stage, for availability of two irrigations schedule it at 30 days and flowering stage, for availability of three irrigations schedule it at 25 to 30 days interval.
SAFFLOWER	<ul style="list-style-type: none"> • Considering the dry weather forecast, undertake need based irrigation for optimum productivity in safflower. In case of availability of one irrigation schedule it at 50 days crop stage, for availability of two irrigations schedule it at 30 and 50 days crop stage, for availability of three irrigations schedule it at 30, 50 and 65 days crop stage. • Due to cloudy weather condition, monitor for incidence of sap sucking aphids particularly in irrigated/late sown safflower crop and for above ETL level incidence (30% infested plants) undertake spray with dimethoate 30 % EC @ 13 ml/10 litres of water.
CITRUS	<ul style="list-style-type: none"> • Nagpur mandarin & Sweet orange: The water requirement in this month is 7-30, 44-72, and 82-102 litres per day for tree of age 1-4, 5-7, 8 years old and above, respectively should be met with drip system. Use double ring method if there is no drip system. Mulching should be done in tree basin if not done earlier. For mulching grass, wheat husk near the tree trunk can be utilized start irrigation to the orchard for initiation of Ambia bahar as per the type of soil & stress received by the trees. • Infestation of citrus psylla occurs with the outburst of new leaves in Ambia bahar. The pest can cause 100 per cent flower drop if not controlled. The pest causes die back and "Greening" disease in affected trees causing slow decline. It can be controlled by spraying Dimethoate 30 EC 2 ml or Acephate 2 g or Imidacloprid 17.8 SL 0.5 ml per litre water at bud burst stage. Second spray should be carried after 10 days interval. Change the pesticides in subsequent sprays. • Spray gibberellic acid 1.5 g with 1 kg urea in 100 litres water at the time of initiation of Ambia flush. For controlling Phytophthora diseases scrape out gum oozing portion by sharp knife, wash with potassium permanganate solution (10 gms in one litre water) from the infected tree trunk and apply Mefenoxam M Z - 68 (Metalaxyl M 4% + Mancozeb 64 % wp) or fosetyl-Al paste.

Crop (Stage)	Crop Specific Advisory
SUGARCANE	• If irrigation system is available, sugarcane cultivation should be started by drip irrigation and joint row method. Intercrops like summer groundnut, onion and cabbage, cauliflower etc. should be taken in sugarcane.
COTTON	• It is advice that in areas where the cotton crop is ready for picking give priority for clean picking of cotton. Keep the picked cotton, variety wise. Use cotton bags instead of gunny or plastic bags for picking and storing of cotton to avoid contamination of the lint. • Farmers are advised to complete picking of cotton the end of December to avoid PBW attack in next season.

Horticulture Specific Advisory:

Horticulture (Stage)	Horticulture Specific Advisory
WATER MELON	• Sugar Baby, Asahi Yamato, Arka Jyoti, Arka Manik should be selected for watermelon cultivation in summer season. Apply 40 kg N, 40 kg P and 40 kg K at the time of planting. Apply 40 kg N 30 days after planting.
MUSKMELON	• Hara Madhu, Pusa Sharbati, Punjab Sunhari, Arka Rajhans, Arka Jeet, Pusa Madhuras should be cultivated for muskmelon crop in summer season. Apply 40 kg N, 40 kg P and 40 kg K at the time of planting. Apply 40 kg N 30 days after planting.
LINSEED	• Due to continuous cloudy weather condition, sucking pests can be observed, it controlled by spraying thiamethoxam 25% WG 10 to 15 gram or Quinalphos 25% EC 40 ml in per 10 liters of water.
ONION	• Six to eight week old seedlings of onion crop should be planted in flat beds at a distance of 10 x 10 centimetres in the first fortnight of January.
CHILLI	• Cool, humid condition and moderate temperature favours the disease. If the incidence of leaf spot disease is observed on chilli crop, it is advised carry out the spraying of Copper oxychloride 50 % WP @ 1000 gm per acre mix with in 300-400 litre of water or Mancozeb 75 % WP @ 600-800 gm per acre mix with in 300 litres of water or Hexaconazole 75 % WG @ 27 gm per acre mix with in 200 litres of water or Kresoxim-methyl 15% + Chlorothalonil 56% WG @ 400 gm per acre mix with in 200 litres of water or Carbendazim 12% + mancozeb 63% WP @ 300 gm per acre mix with in 200 litres of water during the clear weather condition.
BRINJAL	• For management of brinjal fruit and shoot borer Spray Bacillus thuringiensis formulation (1 ml/L) at weekly interval. • Release Trichogramma chilonis @ 2,50,000/ha (50,000/release-5 times at weekly intervals, starting from flowering). Install sex pheromone traps 10/acres. • Spray Chlorantraniliprole 18.5 SC at 0.3 ml/L once in 15 days depending upon the pest population.
TOMATO	• If the symptoms of Late Blight of tomato was noticed due to the previous cloudy weather, spraying should be done with Mancozeb (2.0 g/l) or Copper oxychloride (3.0 g/l) or Bordeaux mixture (1%) or Copper hydroxide (2.0 g/l) or Fosetyl-Al (2.0 g/l) or Dimethomorph (2.0 g/l) combination of Pyraclostrobin + Metiram (2.0 g/l) or Mefenoxam + Copper hydroxide (2.0 g/l) or Metalaxyl 8% + Mancozeb. 64% (2.0 g/l) during clear weather condition.

Live Stock Specific Advisory:

Live Stock	Live Stock Specific Advisory
BUFFALO	• To protect livestock from cold weather, keep the animals indoor during night hours. Provide suitable bedding like paddy straw, wheat straw, saw dust etc. of 4-6-inch thickness to protect the animals from cold. The floor of the animal shed should be kept clean and dry. Provide clean and potable drinking water to animals round the clock. Clean the water trough (once in a week) regularly in livestock. Provide mineral mixture @ 30-40 g/day to cattle for improving the milk production and reproduction efficiency.
COW	• Animals should be vaccinated against foot and mouth disease.

Poultry Specific Advisory:

Poultry	Poultry Specific Advisory
BIRD	• Screens on both sides of the bird shed should be closed at night and early morning during cool weather and open in the afternoon during hot weather. • The aviary should have temperature control facility. • The temperature in the poultry house should be controlled between 21 and 30 degrees Celsius, so light bulbs, grates or brooders should be used in sheds. • Electrolytes, vitamins etc. should be used in their diet to avoid stress due to climate change. • Due to extreme cold, the humidity in the air increases and fungi grow in the bird's bedding and food, and there is a high possibility of respiratory diseases in the birds, so care should be taken to keep the bedding in the bird house clean and dry. • Warm water should be provided to the parties for drinking. • Due to increased energy requirements, food should be prepared as per the advice of a nutritionist. • Get vaccinated as per schedule. • Adequate stock of medicines, saline solutions and vitamins should be kept.

Others (Soil / Land Preparation) Specific Advisory:

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GENERAL ADVICE	<ul style="list-style-type: none"> • It should be noted that the validity of the dates mentioned in the Weather Based Advisory Bulletins will be valid up to 08:30 AM of the mentioned date. *Based on a research trial that was not included in the CIBRC label claim. # Under label claim.
GENERAL ADVICE	<ul style="list-style-type: none"> • As per recommendation this month okra, cluster bean, cowpea, cucumber, pumpkin, bottle gourd, bitter gourd, dhense, watermelon, muskmelon, spinach, radish, fenugreek and coriander should be planted. Use drip or sprinkler irrigation management.