Gramin Krishi Mausam Sewa

District Level Agromet Advisory Bulletin

Central Institute for Cotton Research,
Nagpur

Agromet Advisory Bulletin

Date : 29-12-2023

Weather Forecast of District NAGPUR(Maharashtra) Issued On : 2023-12-29(Valid Till 08:30 IST of the next 5 days)

Parameter	2023-12-30	2023-12-31	2024-01-01	2024-01-02	2024-01-03
Rainfall(mm)	0.0	0.0	0.0	0.0	0.0
Tmax(°C)	28.4	28.1	27.8	27.6	27.4
Tmin(°C)	14.9	15.3	15.5	16.0	16.4
RH-I(%)	84	82	83	80	79
RH-II(%)	60	56	58	54	52
Wind Speed(kmph)	3	4	4	5	4
Wind Direction(Degree)	55	74	127	162	136
Cloud Cover(Octa)	2	2	3	3	3

Weather Summary/Alert:

• In Nagpur district, as per the district level value added forecast given by, IMD, RMC, Nagpur, sky will be clearto partly cloudy during next five days i.e.,30th, December, 2023 to 03rd, January, 2024. • Weather is very likely to be dry on30th and 31st,December, 2023 and 01st, 02nd and 03rd, January, 2024. • Maximum temperature will be in the range from 27.4 to 28.4 degree Celsius whereas minimum temperature will be in the range from 14.9 to 16.4 degree Celsius. • Morning relative humidity will be in the range of 79.0 to 84.0 per cent whereas afternoon relative humidity will be in the range from 52.0 to 60.0 per cent. • Maximum temperature subsequently gradual fall by 2-3 degreeCelsiusduring next 5 days over the Vidarbha. • Minimum temperature gradual rise by 2-3 deg celduring next subsequent days over the region.

General Advisory:

• Considering thedry weather forecast for next 5 days it is advised to give the priority for finishing remaining harvesting and threshing of matured paddy, short duration pigeon pea etc. and picking of cotton. • It is advised to continue the agrochemical spraying operations,intercultural operations and fertilizer application in standing crops. • For optimumyield 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. • 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. • 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 irrigations available irrigate at 21, 42 and 65 days after sowing. • Under the availability of adequate irrigation facility, first irrigation should be apply at crown root initiation stage (18-20 days after sowing), second irrigation should be apply at maximum tillering stage (30 to 35 days after sowing), third irrigation should be apply at late jointing stage (45 to 50 days after sowing), fourth irrigation should be apply at the flowering stage (65 to 70 days after sowing), the fifth irrigation shou

SMS Advisory:

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

Crop Specific Advisory:

Crop (Stage)	Crop Specific Advisory
BENGAL GRAM/ CHICK PEA	• For optimumyield 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

Crop (Stage)	Crop Specific Advisory
	with 10 liters of water should sprayed. • For integrated management of Gram Pod Borer 20 bird perches per hectare should be install up in the field. For control of gram pod borer install pheromone traps (Hexalur) 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 Azadiractin 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.
PIGEON PEA (RED GRAM/ARHAR)	• Install pheromone traps at a distance of 50 m @ 5 / ha for monitoring of Helicoverpa. If the incidence of pod borer is noticed on pigeon pea crop and crossing economic threshold level, spraying should be done of any of recommended insecticide viz., Chlorantraniliprole 18.50 % SC @ 150 ml in 500 to 750 litres of water per hectare or Emamectin benzoate 05 % SG @ 220 gram in 500 to 750 litres of water per hectare or Ethion 50 % EC @ 1000-1500 ml in 500-1000 litres of water per hectare or Flubendiamide 20 % WG @ 250 gram in 500 litres of water per hectare or Flubendiamide 39.35 % m/m SC @ 100 ml in 500 litres of water per hectare or Lambda-cyhalothrin 05 % EC @ 400-500 ml/ha in 400-600 liters of water per hectare or Quinalphos 25 % EC @ 1400 ml/ha in 500-1000 liters of water per hectare or Chlorantraniliprole 09.30 % + Lambda-cyhalothrin 04.60 % ZC 200 ml/ha in 500 litres of water per hectare.
MUSTARD	• 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.
CITRUS	• Harvesting of Ambia bahar fruits should be completed as far as possible and the trees should be put on water stress by withdrawing irrigation. For adequate stress spray cycocel @ 2 ml/lit of water. Dead wood pruning may be done after harvest of Ambia fruits which should be immediately followed by spraying of fungicide, Carbendazim @ 1 gm/litre water. Nurserymen should start budding programme. Budding should be done 20 to 25 cm above ground level. Drip irrigation on Mrig bahar bearing trees of Nagpur mandarin and sweet orange should be continued. Apply by drip irrigation 41 litres water/day/tree to 6 years tree and 82 litres water/day/tree to 10 years and above trees. Continue drip irrigation for Mrig bahar crop. In case of incidence of citrus mite that cause brownish patches on the outer skin of the fruits spray dicofol @ 2 ml or Wettable sulphur @ 3 g or propargite @ 1 ml per litre of water. After 15 days second application should be given with any one of the two above miticides to check “Lalya” effectively. For citrus leaf miner management particularly in nursery pluck and destroy the affected leaves and spray thiamethoxam @ 0.3 g or imidaclopride @ 0.5 ml or Quinalphos @ 2 ml or dimethoate @ 2 ml/lit water. Second spray with any of the above insecticides should be given for better result after 15 days. If there is an incidence of Phytophthora (gummosis) on trunk of tree, scrap out the gum oozing portion, wash it with potassium permanganate solution and apply fosetyl Al or mefenoxam MZ paste.
RICE	• It is advised to give the priority for completion of remaining harvesting and threshing of matured paddy crop during next 5 days.
SUGARCANE	• If irrigation system is available, sugarcane cultivation should be started by drip irrigation andjoint row method. Intercrops like summer groundnut, onion and cabbage, cauliflower etc. should be taken in sugarcane.
WHEAT	• Sowing of late irrigated wheat should be done till 07th, January. For sowing of late irrigated wheat varieties viz., AKAW-4627 and PDKV Sardar (AKAW-4210-6) should be select. For late sowing of irrigated wheat 150 kg seed per hectare should be used for sowing. For coarse seed varieties like HD 2189 or Purna of wheat crop, 125 kg seed per hectare should be used. • Apply 80 kg N, 40 kg P and 40 kg K per hectare for late sowing wheat. For both irrigated and late sowing, apply half dose of nitrogen as well as full phosphorus and potash at the time of sowing and the remaining half dose at the time of first irrigation (18 to 20 days after sowing).
WHEAT	• 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 apply at crown root initiation stage (18-20 days after sowing), second irrigation should be apply at maximum tillering stage (30 to 35 days after sowing), third irrigation should

Crop (Stage)	Crop Specific Advisory
	be apply at late jointing stage (45 to 50 days after sowing), fourth irrigation should be apply at the flowering stage (65 to 70 days after sowing), the fifth irrigation should be apply at the milky stage of the grain (80 to 85 days after sowing) to the wheat crop.
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 tocomplete picking of cotton the end of December to avoid PBW attack in next season. • If pink bollworm incidence crosses ETL, (i.e. 5-10% of green boll infestation or more than 8 moths per trap per night consecutive 3 days), spray Cypermethrin 10% EC @10-15ml Or Cypermethrin 25% EC @ 46ml Or Lambda cyhalothrin 5%EC @10ml Or Deltamethrin 2.8EC @10ml Or Fenpropathrin 10 % EC@15-20ml or Fenvalerate 20EC @ 10ml Or Alphacypermethrin 10% EC @ 6ml/10 litres of water. • To manage grey mildew and leaf spots, undertake spray of Carbendazim 12%+ Mancozeb 63% WP@30 g or Kresoxim methyl 44.3 SC @ 10 ml or Azoxystrobin18.2% w/w + Difenoconazole11.4% w/w SC @ 10 ml in 10 litres of water. • Apply foliar spray of copper oxychloride 50 WP/WG@ 25-30 g/10 litres of water to manage bacterial blight in cotton. Collect and destroy diseased bolls and crop debris from the fields.

Horticulture Specific Advisory:

Horticulture (Stage)	Horticulture Specific Advisory
CHILLI	• Due to alternative low and high temperature coupled with high humidity, if the powdery mildew disease is noticed on chilli crop, spraying should be done of any of following fungicide, Hexaconazole 75 % WG @ 66.7 gram or Tebuconazole 25% WG @ 500-750 gram or Azoxystrobin 8.3 % + Mancozeb 66.7 % WG @ 1500 gram or Boscalid 25.2% + Pyraclostrobin 12.8 % WG @ 600 gram or Carbendazim 12 % + Mancozeb 63 % WP @ 750 gram or Kresoxim-Methyl 15 % + Chlorothalonil 56 % WG @ 1000 gram or Tebuconazole 10 % WP + Sulphur 65 % WG @ 1250 gram or Tebuconazole 50 % + Trifloxystrobin 25% WG @ 250 gram mixed with in 500 litre of water per acre for management of disease.
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	• As a precautionary measure, for management of Early Blight disease of tomato spraying should be done with Copper oxychloride (3.0 g/l) or Copper hydroxide (2.0 g/l) one or two days before transplanting. Spray Copper oxychloride (3.0 g/l) or Mancozeb (2.0 g/l) or Chlorothalonil (2.0 g/l) or Propineb (2.0 g/l) or Metiram (2.0 g/l) or Pyraclostrobin + Metiram (2.0 g/l) or Tebuconazole 50 % + Trifloxystrobin 25 % w/w (0.6 ml/l) at 10-15 days interval or as and when required in the main field. • 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 footandmouth disease.

Fishieries Specific Advisory:

Fishieries	Fishieries Specific Advisory
SWEET WATER FISH	• As feed intake decreases with decrease in temperature, it is essential to reduce the feeding rate by 50-75% depending on the temperature. During winter the surface water of the pond is colder than bottom layer where, fish prefer to spend more time. Hence fish farmer may keep the water depth up to 6 feet.The farmers are advised to aerate their ponds either by adding fresh water or by using aerators, especially during early hours of the day.

Others (Soil / Land Preparation) Specific Advisory:

Others (Soil / Land Preparation)	Others (Soil / Land Preparation) Specific Advisory
GENERAL ADVICE	• 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	• Nursery brinjal, tomato, cauliflower and cauliflower seedlings should be planted in the field at the age of 4 to 6 weeks. Fenugreek, spinach, cilantro, radish and carrot should be planted in stages.