Gramin Krishi Mausam Sewa

District Level Agromet Advisory Bulletin

Central Institute for Cotton Research,

Nagpur

Agromet Advisory Bulletin

Date : 20-10-2023

Weather Forecast of District NAGPUR(Maharashtra) Issued On : 2023-10-20(Valid Till 08:30 IST of the next 5 days)

Parameter	2023-10-21	2023-10-22	2023-10-23	2023-10-24	2023-10-25
Rainfall(mm)	0.0	0.0	0.0	0.0	0.0
Tmax(°C)	33.2	33.1	33.3	33.0	32.8
Tmin(°C)	21.3	21.0	20.8	20.6	20.2
RH-I(%)	74	71	73	74	77
RH-II(%)	54	51	53	50	52
Wind Speed(kmph)	5	5	5	5	5
Wind Direction(Degree)	34	132	103	23	16
Cloud Cover(Octa)	2	2	3	3	4

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 and weather isvery likely to be dry during next five days i.e.,21st, to 25th, October, 2023. • Maximum temperature will be in the range from 32.8 to 33.3 degree Celsius whereas minimum temperature will be in the range from20.2 to 21.3 degree Celsius. • Morning relative humidity will be in the range of 71.0 to 77.0 per cent whereas afternoon relative humidity will be in the range from 50.0 to 54.0 per cent. • No large change in maximum and minimum temperatures over Vidarbha for the next 5 days.

General Advisory:

• Considering dry weather forecast,it is advised to continue the agrochemical spraying operations,intercultural operations and fertilizer application in standing crops during next 5 days. • Considering dry weather forecast, it is advised to continue the harvesting and threshing of matured soybean, paddyand others cropandpicking of burst cotton during next 5 days. • Care should be taken that the harvested crops are not exposed to rain. After harvesting the crop, the farm produce should be collected and stored in a dry and safe place. • Dryland wheat crop should be sown in the second fortnight of October. • Sowing of irrigated linseed should be done up to 07th, November. • Deshi varieties and seed rate of chickpea for sowing- Hirawa Chafa (AKGS-1), Vijay and ICCV-10 (50-60 kg/ha seed), PKV Harita (AKG- 9303-12) and JAKI- 9218 (75-85 kg/ha seed), Kabuli varieties and seed rate of chickpea, PKV Kabuli-2 & PKV Kabuli-4 (110-115 kg/ha seed), Pink chickpea variety and seed rate, Gulak-1 (75-85 kg/ha seed) are recommended for sowing up to second fortnight of October to 15th November and sowing of PKV Kanchan (AKG- 1909) (50-60 kg/ha seed) variety of chickpea up to second fortnight of October to 15th November. • Seed treatment should be done of recommended active ingredient before sowing of the Rabbi season crop.

SMS Advisory:

• Considering dry weather forecast, it is advised to continue the harvesting and threshing of matured soybean, paddyand others crop andpicking of burst cotton during next 5 days.

Crop Specific Advisory:

Crop(Varieties)	Crop Specific Advisory
WHEAT	• Medium heavy, deep and well-drained soil should be selected for wheat crop. When preparing the land for wheat crop, 15 to 20 cm deep ploughing should be done. The soil should be harrowing by giving 2 to 3 shifts. Clean the field by removing the previous crop debris and stick waste. Land should be as level as possible so that further irrigation can be managed. Dryland wheat crop should be sown in the second fortnight of October. Use 75 kg seed per hectare for sowing of dryland wheat. Dryland wheat should be sown with sufficient moisture in the soil and adequate care should be taken to ensure that the sown seeds get sufficient soil moisture contact. For sowing of dryland wheat, spacing between two rows should be 23 cm. Care should be taken not to fall deeper than 5 to 6 cm at the time of sowing wheat. • Varieties should be AKDW 2997-16 (Sharad), PDKV Washim (WSM-1472), MACS 1967 and NI 5439 for dryland wheat sowing. PDKV Washim (WSM-1472) should be sown under limited availability of irrigations. Varieties should be AKDW 1071 (Purna), AKDW 3722 (Vimal), HD 2189 and HD 2380 for timely sowing of irrigated wheat,Varieties should be PDKV Sardar (AKAW 4210-6), AKAW 4627, AKAW-381, AKAW 1071 (Purna) and HI 977 for late sowing of irrigated wheat. • Before sowing, wheat seeds should be treated Azotobacter (Nitrogen fixing bacteria) and Phosphorus solubilizing bacteria fertilizer at the rate of 250 g / 10 to 12 kg of seed. • Seed treatment should be given

Crop(Varieties)	Crop Specific Advisory
	to wheat seed prior to sowing avoid fungal diseases and pest incidence, for this purpose recommended fungicide and insecticides are Carboxin 75 % WP @ 2-2.5 gm/kg of seed to manage Bunt, Flag smut and Loose smut disease or Difenoconazole 3 % WS @ 2 gm/kg to manage Loose smut disease or Tebuconazole 5.4 % w/w FS @ 0.3 ml/kg of seed to manage Loose smut and Flag smut disease or Carboxin 37.5% + Thiram 37.5% WS @ 3 gm/kg of seed to manage Loose smut disease or Imidacloprid 18.5 % + Hexaconazole 1.5% FS @ 2 ml/kg of seed to manage the Rust and Smut diseases as well as Termite and Aphid incidence.
BENGAL GRAM/ CHICK PEA	• Deshi varieties and seed rate of chickpea for sowing- Hirawa Chafa (AKGS-1), Vijay and ICCV-10 (50-60 kg/ha seed), PKV Harita (AKG- 9303-12) and JAKI- 9218 (75-85 kg/ha seed), Kabuli varieties and seed rate of chickpea, PKV Kabuli-2 & PKV Kabuli-4 (110-115 kg/ha seed), Pink chickpea variety and seed rate, Gulak-1 (75-85 kg/ha seed) are recommended for sowing up to second fortnight of October to 15th November and sowing of PKV Kanchan (AKG- 1909) (50-60 kg/ha seed) variety of chickpea up to second fortnight of October to 15th November. • Before sowing of gram seed, seed treatment should be done of 5 gm of Trichoderma or 2 gm of Thirum + 2 gm of Carbendazim per kg of seed, followed by 250 gm of Rhizobium (Nitrogen Fixing Bacteria) and 250 gm of P. S. B. (Phosphorus Solubilizing Bacteria) seed treatment should be done by mixing cold solution of jaggery per 10 kg seed. After seed treatment the seeds should be dried in the shade for an hour and then sown. • Seed treatment should be given to chickpea seed prior to sowing to avoid fungal diseases, for this purpose recommended fungicide is Tebuconazole 5.4 % w/w FS @ 0.4ml/kg to manage Root rot and Wilt disease.
SAFFLOWER	• Sowing of safflower under irrigation can be done till the end of October. • If the seeds are soaked overnight and sown, germination is quick and good. • While sowing, the distance between two rows should be 45 cm. • Safflower crop can be taken as an intercrop with chickpea, linseed system in the ratio of Safflower + Chickpea (6:3) or Safflower + Linseed (3:3). • 40 kg of Nitrogen (194 kg of ammonium sulphate or 87 kg of urea) + 25 kg of Phosphorus (156 kg of single super phosphate) per hectare should be applied to dryland Safflower crop.
SOYABEAN	• Farmers are advised to harvest the soybean crop after 90 % pods have turned yellow. This will not have adverse effect on the seed germination. The crop must be dried immediately in sunlight protecting from rain or under shade. • The harvested crop must be threshed after sun drying. If the threshing is not done immediately, it should be stored at safe place protecting from rains. • If the produce is to be used for seed purpose in the next season, farmers are advised to thresh the soybean at 350 to 400 RPM thresher to avoid the loss of seed germination. • When storing soybean seeds, the moisture content should not exceed 8%. A 100 kg bag should not be added more than 5 times. Do not hit the seed bag.
COTTON	• If the incidence of internal boll rot/bacterial boll rot is noticed in cotton at squaring, flowering and boll development stage, for management it is advised to collect and destroy the dried petals sticking to the developing bolls should be removed. Avoid indiscriminate use of nitrogenous fertilizers. Restrict excess vegetative growth of the cotton crop. Facilitate proper drainage in the field to avoid water logging in the field. A prophylactic spray of Copper Oxychloride 50 WP @ 25g/10 L is suggested during early boll developmental stages at 15 days interval. Manage sucking pests with spray of recommended insecticides. • If the incidence Target leaf spot, Alternaria leaf spot, Myrothecium leaf spot, External fungal boll rot was noticed in cotton crop, it is advised to take the prophylactic spray of Propineb 70 WP@25-30 g Or Azoxystrobin 18.2%w/w + Difenoconazole 11.4% w/w SC@ 10 ml Or Fluxapyroxad 167 g/l + Pyraclostrobin333 g/l SC@ 6g Or Carbendazim 50 WP@20 gm Or Propiconazole 25 EC @10 ml Or Pyraclostrobin 5% + Metiram 55% WG @20 g per 10 litres water. • For management of grey mildew disease, Spaying should be taken with Kresoxim-methyl 44.3% SC @1ml Or Azoxystrobin 18.2%w/w + Difenoconazole 11.4% w/w SC@ 10 ml Or Propineb 70 WP@25-30 g Or Carbendazim 50 WP@20gm Or Propiconazole 25 EC @10 ml Or Pyraclostrobin 5% + Metiram 55% WG fungicide @20 g Or Fluxapyroxad 167 g/l + Pyraclostrobin333 g/l SC@ 6 g per 10 litres of water.
COTTON	• Install pheromone traps @ 5 per hectare for monitoring moth activity of pink bollworm. • Remove and destroy rosette flowers whenever seen. • At boll formation stage, farmers are advised to inspect the presence and damage of pink bollworm by plucking 20 green bolls from different plants randomly (one boll per plant). If ETL crossed i.e. >10% damaged flowers (Rosette flowers) or 10% damaged green bolls (at least two out of 20 bolls having white or pink larvae or exit holes) and or 8 moths catch per pheromone trap for consecutive 3 days, spray Profenofos 50 EC @ 30 ml/10L (1500 ml/ha) Or Emamectin benzoate 5 SG @ 5g/10L (250 g/ha) Or Indoxacarb 14.5 SC @10ml/10L (500ml/ha) Or Chlorpyriphos 20 % EC @ 25ml/10L (1250 ml/ha) by judging the local calm and clear weather condition.
COTTON	• Spray 2% urea at flowering stage and 2% spray of DAP at boll development stage of cotton. • Spray NAA 4.5 SL @ 4ml /10 litres of water to avoid natural shedding of squares and flowers of cotton and Mepiquat Chloride @ 10 ml/10 litres of water to restrict the excess vegetative growth of cotton by judging the local calm and clear weather condition. • If the incidence of thrips is noticed in cotton, on crossing ETL it is advised to spray Thiamethoxam 25% WG @ 2 gm/10L (100g/ha) Or Spinetoram 11.7 SC @ 8.4 ml/10 L (420 ml/ha) by judging the local calm and clear weather condition. • If the incidence of jassids was noticed, on crossing ETL, it is advised to spray Thiamethoxam 25% WG @ 2 gm/10L (100g/ha) by judging the local calm and clear weather condition. • For management of white fly spray Dinotefuran 20 SG @ 3g/10L (150g/ha) or Spiromesifen 22.9 SC @ 12ml/10L (600 ml/ha) or Pyriproxyfen 10 EC @ 20ml/10L (1000 ml) /ha or Diafenthiuron 50% WP @ 12g/10L (600 g/ha).
RICE	• Keeping view in weather, farmers are advised to harvest of mature rice crop should be done close to the ground so that the pupation of stem borer is eliminated and the incidence of this pest in summer paddy crop is reduced. • After harvesting, crop should be dried in the field for 2-3 days and thereafter threshing should be done. • Granular pesticides should not be used after the reproductive stage of crop. • Leaf roller/folder: - Nitrogenous fertilizers

Crop(Varieties)	Crop Specific Advisory
	should be used in a balanced manner. Infected leaves wrapped by larvae should be collected and destroyed with larvae. Beauveria bassiana as a bio-insecticide 1.15 % @ 2.25 kg/ha or Azadirachtin 0.15 % @ 30-50 ml. or Quinalphos 20% F @25 ml. or Indoxacarb 15.8 % @ 4.0 ml. spray by mixing in 10 liters of water. • Plant hoppers: - Although rice crop is prone to plant hoppers, use Metarhizium anisopliae as a bio-insecticide 1.15% @ 2.5 kg/ha. Buprofezin 25% @16 ml for control as soon as the level of financial loss is exceeded. or Imidaclopride 17.8 SL.@ 2.0 ml. or Fipronil 5 SC@ 20 ml. or Flonicamid 50 WG @ 3.0 gm Mix in 10 liters of water and spray. • Stem borer: - Bio-control: - Pheromone traps should be set 20 per ha. Trichogramma japonicum (Trichocard) is a parasitic insect release 50,000 eggs per hectare 3 to 4 times every 7 days. Chemical control: - Spray Chlorantraniliprole 0.4% G @ 10 kg. or Cartap Hydrochloride 4 G @ 18 kg. or Fipronil 0.3 G @ 25 kg. apply per hectare when there is water in paddy bund or apply chlorantraniliprole 18.5% SC @ 3 ml per 10 liters of water. • Gall midge: - Apply Carbofuran 3% G @ 25 kg per hectare by maintaining water level 7 to 10 cm. Do not remove water from paddy bunds for 4 to 5 days. These pesticides should be used again after 30 days as required. • Blast and Neck blast: - Spray Hexaconazole 5% EC @ 20 ml. or Mancozeb 75% @ 30 gm per 10 liters of water. • Bacterial leaf blight: - Spray Copper hydroxide 53.8% DF @ 30 gm + Streptomycin 1.5 gm per 10 liters of water. • False smut: - At 50% flowering stage of paddy crop spray Copper hydroxide 77% WP @ 30 gm per 10 liters of water in the afternoon. • After paddy planting till the roots of the plant is well established, the water level should be 2.5 cm. (one inch) should be kept. After this, the level is usually about 5 cm till the grain matures. (Two inches) should be increased. • Maintain 10 cm (Four inches) water level in transplanted rice / paddy field 10 days before panicle initiation and 10 days after panicle initiation. Water stress should not be allowed when the crop is in flowering stage.
CITRUS	• Sowing of seeds of rootstocks of Jamberi/Rangpur lime may be done in plastic trays. Manage fruit sucking moth by preparing a poison bait containing 10 ml malathion, and 100 ml orange juice mixed with 100 g gur (jaggery) in 900 ml of water. Fill it in a broad mouth bottle and hang two bottles per 25 trees all over the orchard. To manage fruit fly, install (methyl eugenol traps) @ 20 traps per hectare from 60 days before fruit harvest and change the lure after every 30 days. Follow clean cultivation in orchard and bury fallen fruit in a pit and cover it with soil every day. For Phytophthora infected trees, spray and soil drench with mefenoxam MZ 68 @ 2.5 gm / litre or Fosetyl Al @ 2.5 gm per litre covering the tree canopy. Weeding and harrowing operation should be done in the orchard. Spray carbendazim @ 1gm per litre at 15 days interval for Ambia crop. Spray 2,4-D @ 1.5 g + urea 1% followed by Gibberlic acid 1.5 gms after 15 days for control of pre-harvest fruit drop in Ambia crop. For increasing fruit size in Mrig crop follow alternate foliar spray application of 2, 4-D or Gibberlic acid @ 1 g in combination with either Monopotassium phosphate, Diammonium phosphate, potassium nitrate @ 2% at 15-20 days interval depending on the crop load. Mentioned spraying operation should be done by judging local clear weather condition.

Horticulture Specific Advisory:

Horticulture(Varieties)	Horticulture Specific Advisory
LINSEED	• Sowing of irrigated linseed should be done up to 07th, November. Before sowing, seed treatment should be done of Carbendazim 2 gm or Thirum 3 gm per kg of seed. After 3 hours, seed treatment should be done at the rate of 20 g of Azotobacter and 20 g of phosphorus solubilizing bacteria per kg of seed.
BRINJAL	• If the incidence of fruit and shoot borer is noticed on brinjal crop, spraying should be done of any of following insecticides on crossing ETL, Carbosulfan 25 % EC 1250 ml per hectare or Deltamethrin 02.80 % EC 400 to 500 ml per hectare or Emamectin benzoate 05 % SG 200 gram per hectare or Lambda-cyhalothrin 04.90 % CS 300 ml per hectare or Spinosad 45 % SC 162 to 187 ml per hectare or Thiacloprid 21.70 % SC 750 ml per hectare or Chlorantraniliprole 09.30 % + Lambda-cyhalothrin 04.60 % ZC 200 ml per hectare mix with in 500 litres of water per hectare.
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.

Live Stock Specific Advisory:

Live Stock(Varieties)	Live Stock Specific Advisory
BUFFALO	• Lucerne and Berseem fodder crops should be planted for availability of nutritious fodder for animals.Keep animal shed clean, dry and well ventilated. Deworming should be done, if not done earlier within 3 months. Disinfection/fumigation of shed should be done by using formalin. Include dry fodder/feed in the diet of small and large ruminants to avoid diarrhoea/indigestion. Provide complete ration to the livestock. Apply recommended doses of fertilizers to fodder crop.

Poultry Specific Advisory:

Poultry(Varieties)	Poultry Specific Advisory
BIRD	• Provide nutritious feed and fresh, clean and cold water to the birds.

Others (Soil / Land Preparation) Specific Advisory:

Others (Soil / Land Preparation) (Varieties)	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	• Garlic, Radish, Fenugreek, Spinach, Shravan Ghewda, Potato, Carrot, Guar, Pea etc. should be cultivated.