

### Gramin Krishi Mausam Sewa District Level Agromet Advisory Bulletin

Central Institute for Cotton Research, Nagpur



## **Agromet Advisory Bulletin**

Date: 18-10-2022

Weather Forecast of District NAGPUR(Maharashtra) Issued On: 2022-10-18(Valid Till 08:30 IST of the next 5 days)

Parameter	2022-10-19	2022-10-20	2022-10-21	2022-10-22	2022-10-23
Rainfall(mm)	4.4	0.8	0.0	0.0	0.0
Tmax(°C)	33.3	32.9	32.5	32.0	31.7
Tmin(°C)	21.1	20.7	20.4	20.1	19.8
RH-I(%)	92	84	81	75	69
RH-II(%)	82	75	67	61	58
Wind Speed(kmph)	4.0	4.0	5.0	6.0	6.0
Wind Direction(Degree)	22	40	33	28	36
Cloud Cover(Octa)	3	2	5	2	4

#### **Weather Summary/Alert:**

• In Nagpurdistrict, as per the district level forecast given by, IMD, RMC, Nagpur, sky will bepartially cloudyduring next five days i.e.18th to 22nd,October, 2022. • Light to moderate rainfall very likely to occur at few places on18th, October, 2022. • Light to moderate rainfall very likely to occur at isolated places on19th, October, 2022. • Thunderstorm with lightning very likely to occur at isolated places on18th, October, 2022. • As per the extended range forecast system in Vidarbha Sub Division region during 23rd to 29th,October, 2022 rainfall will be above normal where as maximum and minimum temperature will be normal.

#### **General Advisory:**

• It is advised to carry out harvesting and threshing of matured soybean and other kharif matured crop after 2-3 days during clear weather condition. • Cover the harvested produced of soybean and other matured crop with plastic sheet and threshed produced at safer places by considering the light to moderate rainfall forecast for next 2 days. • Spraying of agrochemicalsandfertilizer application in standing crop should be carry out after 2-3 days during early morning hours by judging local calm &clear weather condition. • Farm work should be planned only by considering the local weather forecast andwarning. Farmers and farm laborers should take shelter in a safe place in view of the possibility of lightning along with rain and thunder. • Priority should be given to finish the most important work in the field preferably in the earlymorning hours.

#### **SMS Advisory:**

• It is advised to carry out harvesting and threshing of matured soybean and other kharif matured crop after 2-3 days during clear weather condition.

#### **Crop Specific Advisory:**

Crop(Varieties)	Crop Specific Advisory

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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. • Spraying of agrochemicals, fertilizer application in standing crop & intercultural operations should be carryout during early morning hours by judging local calm &clear weather at Wafsa condition.
COTTON	• Spraying of agrochemicalsandfertilizer application in standing crop should be carry out after 2-3 days during early morning hours by judging local calm &clear weather condition. • Keep a vigil on the attack of sucking pests and apply spray when infestation seen above ETL, i.e., Flonicamid 50 WG @ 80 g or Dinotefuran 20 SG @ 60 g/acre or Thiamethoxam 25 WG @ 40 g/acreduringelearweathercondition. • Install pheromone traps @ 2 per acre to monitor PBW infestation. Whenever 6-8 moths /trap for 3 consecutive nights are recorded or 10% rosette flowers or green boll damage are recorded, spray Profenophos 50 EC @ 600ml or Indoxacarb 14.5 SC @200 ml/acre or Emamectin benzoate 5 SG @100 g or Chlorpyrifos 50 % EC @ 500ml per acre to control PBW. Use eggs @1.5 lakh/ha of Trichogramma in cotton field to manage PBW.
COTTON	• Spraying of agrochemicalsandfertilizer application in standing crop should be carry out after 2-3 days during early morning hours by judging local calm &clear weather condition. • Spray 2% urea at flowering stage and 2% spray of DAP along with a spray 1 % Urea and 1 % Magnesium sulphate at boll development stage to avoid reddening of cotton in later crop stage. • Prophylactic sprays of Copper oxychloride 50 WP/WG @25-30 g followed by Propiconazole 25 EC @10 ml or Propineb 70WP @25 g mixed in 10 litres of water after seven days is suggested to manage internal boll rot disease. • In some parts occurrence of Corynespora leaf spot disease has been noticed on lower canopy and bracts. Foliar spray of Carbendazim 50 WP@1 ml/litre or Propiconazole 25 EC@ 1 ml/litre or (Metiram 55% +Pyraclostrobin 5% WG) @ 2 g/litre or (Azoxystrobin 18.2% w/w + Difenoconazole 11.4% w/w SC) @1 ml/litre or (Fluxapyroxad 167 g/L + Pyraclostrobin 333 g/L SC @0.6 g/litre of water is recommended for its management. • If parawilt symptom is observed in cotton due to rains, drench the affected plants with Copper oxychloride 50 WP@25 g+ Urea 150 g in 10 litres of water. • To manage fungal foliar spots and fungal boll rot diseases, apply Carbendazim 50 WP @10 g or Kresoxim-methyl 44.3 SC@10 ml or Propineb 70 WP@25 g or Propiconazole 25 EC@ 10 ml or Metiram 55% +Pyraclostrobin 5% WG @20 g or Azoxystrobin 18.2% w/w + Difenoconazole 11.4% w/w SC @10 ml or Fluxapyroxad 167 g/l + Pyraclostrobin 333 g/l SC @ 6 g mixed in 10 litres of water.
COTTON	• Spraying of agrochemicalsandfertilizer application in standing crop should be carry out after 2-3 days during early morning hours by judging local calm &clear weather condition. • It is recommended to spray NAA 4.5 SL@ 3-4 ml /10 litres of water to avoid natural shedding of squares and flowers of cotton and it is also suggested to undertake the spray of chlormequat chloride 50 % SL@ 1-2 ml per 10 litres of water or Mepiquat Chloride 5 % SL@ 10 ml/10 litre of water to restrict the excess vegetative growth of cotton.
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 with 2.5 g / kg of Thirum or Vitavax 75 % WS. As well as Azotobacter (Nitrogen fixing bacteria) and Phosphorus solubilizing bacteria fertilizer at the rate of 250 g / 10 to 12 kg of seed.

Crop(Varieties)	Crop Specific Advisory
RICE	• Spraying of agrochemicalsandfertilizer application in standing crop should be carry out after 2-3 days during early morning hours by judging local calm &clear weather condition. • Pest management: - • Plant hoppers: - Although rice crop is prone to plant hoppers, use Metarhizium anisopliae as a bio-insecticide @ 2.5 kg/ha. Buprofezin 25% @16 ml for control as soon as the level of financial loss is exceeded. or Imidacloprid 17.8 SL.@ 2.2 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. Azadiractin 0.15 % (1500 ppm) @ 30-50 ml as soon as 5 % infested footway appears in the field • Chemical control: - Spray quinalphos @ 32 ml. or Carbosulfon 25 % @ 16 ml. Spray mixed with 10 liters of water or Carbofuron 3% granular @ 25 kg per hectare or Fipronil 0.3% granular @ 16.67 kg. per hectare When there is water in the paddy land, it should be applied. • 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. • Disease management: - • Blast and Neck blast: - Spray Hexaconazole 5% EC @ 20 ml. or Mencozeb 75% @ 30 gm per 10 liters of water. • Bacterial leaf blight: - Spray Copper hydroxide 53.8% DF @ 30 gm + Streptocycline 1.5 gm per 10 liters of water.
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.
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.

# **Horticulture Specific Advisory:**

Horticulture(Varieties)	Horticulture Specific Advisory
BRINJAL	• Spraying of agrochemicalsandfertilizer application in standing crop should be carry out after 2-3 days during early morning hours by judging local calm &clear weather condition. • Due to higher humidity and cloudy weather condition in lastweek, 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 Lambdacyhalothrin 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	• Spraying of agrochemicalsandfertilizer application in standing crop should be carry out after 2-3 days during early morning hours by judging local calm &clear weather condition. • 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.

Horticulture(Varieties)	Horticulture Specific Advisory
ТОМАТО	• Spraying of agrochemicalsandfertilizer application in standing crop should be carry out after 2-3 days during early morning hours by judging local calm &clear weather condition. • If the incidence of early blight disease is noticed in tomato crop, it is advice to take spraying during clear and calm weather condition with Azoxystrobin 23% SC 500 ml/hectare or Pyraclostrobin 20% WG @ 375-500 gm/hectare mix with in 500 litre of water per hectare on ETL.
MANDARIN ORANGE	• Spraying of agrochemicalsandfertilizer application in standing crop should be carry out after 2-3 days during early morning hours by judging local calm &clear weather condition. • 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. Create smoke in orchard with grass (wet), cow dung cakes and neem leaves in the late evening hours i.e. 7.00 to 8.00 pm to repel the fruit sucking moth. 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 gibberellic acid 1.5 gms after 15 days for control of preharvest fruit drop in Ambia crop. For increasing fruit size in Mrig crop follow alternate foliar spray application of 2, 4-D or gibberellic 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.
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.

### **Live Stock Specific Advisory:**

Live Stock(Varieties)	Live Stock Specific Advisory
BUFFALO	• Cows, buffaloes, goats, sheep and other domestic animals should be avoided to graze in open spaces considering the possibility of thunderstorm with lightning. Animals should be kept away from open water sources, rivers or lakes and away from tractors and other metal implements. • The floor of the animal shed should be kept dry and clean. • The feed and fodder should be stored properly to prevent the growth of moulds. • Maintain the surrounding of animal shed clean and hygienic and remove the unwanted vegetation nearby the sheds.

# Others (Soil / Land Preparation) Specific Advisory:

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

Others (Soil / Land Preparation) (Varieties)	Others (Soil / Land Preparation) Specific Advisory
GENERAL ADVICE	• Maximum distance between two persons should be maintained without allowing farm laborers to work together in the field. • While taking shelter in the field, take shelter at a maximum distance from water sources (well, lake, river etc.), high places (trees, hills), metal implements. Farmers and farm laborers should avoid sheltering under trees and animals should also avoid sheltering under trees. • Farmers should take care of thunder and lightning in the sky: If you are working in the field, take shelter immediately near the field. After taking shelter in a safe place in the field, keep dry wood, plastic, gonapath, dry mulch under the feet. Sit with both feet together and both hands on your knees. Make sure that no part of your body touches the ground except your feet. Individuals working in ponds, such as places where there is moisture in the soil or water sources, should go to a safe and dry place immediately. If there are tall trees nearby, take shelter at a distance twice the height of that tree. A pucca house is the safest place to avoid lightning. Farmers should plant trees as low as possible around their houses and livestock sheds. Moist, swampy places and water sources (wells, lakes, rivers, farm ponds etc.) should be avoided as much as possible. If traveling in a four-wheeler, stop in the vehicle. Farmers should take care that they do not have any metal tools. When working in the field, do not let more people work together at the same time. Care should be taken to keep a distance of at least 15-20 feet between two persons. Do not use an umbrella with a metal rod. Stay away from other electric tools made by farmers as well as metal ones.