



# Gramin Krishi Mausam Sewa

## Experimental Block Level Agromet Advisory Bulletin

(A Joint Initiative of IMD & ICAR)



Central Institute for Cotton Research, Nagpur

## Agromet Advisory Bulletin

Date: 05-10-2021

Weather Forecast of Narkhed Block of NAGPUR (Maharashtra) Issued On: 05-10-2021 (Valid Till 08:30 IST of the next 5 days)

Parameter	06-10-2021	07-10-2021	08-10-2021	09-10-2021	10-10-2021
Rainfall (mm)	1.6	2	2.1	1.4	0.7
Tmax (°C)	33.7	34	32.9	34.2	34.5
Tmin (°C)	23.2	23.3	22.9	23.2	23.7
RH-I (%)	85	92	87	82	80
RH-II (%)	77	80	79	76	72
Wind Speed (kmph)	8	10	8	8	9
Wind direction (Degree)	75	75	82	119	277
Cloud Cover (Octa)	8	7	7	8	6

### Weather Summary/Alert:

In Narkhed block, as per the block level value added forecast given by, IMD, RMC, Nagpur, sky will be partially to mostly cloudy and very light to light rain occur during next five days during 06th, October, 2021 to 10th, October, 2021 and thunderstorm accompanied with lightning very likely to occur on 06th October, 2021 is forecasted.

### General Advisory:

Carry out harvesting of matured soybean and others crop and harvested should be stored on elevated field and if threshing is not possible and cover the harvested produce with tarpaulin and allow for sun drying by considering the local weather condition. The spraying of agrochemicals in field crop, vegetables and fruit orchards should be carried out by judging the local weather condition. Thunderstorm and lightning are forecasted so that avoid letting cow, buffalo, goats, sheep and other animals graze in open spaces. Farmers should immediately take shelter in a safe place if they hear thunder while working in the field.

### SMS Advisory:

It is advice to store the harvested produce in safe and dry place and carry out threshing operations.

### Crop Specific Advisory:

**Crop** : Advisory:

**Sorghum** : Rabi sorghum land preparation, seed treatment, nutrient and sowing management: Medium to deep / heavy, high water holding capacity and well-drained soil should be selected for rabi sorghum sowing. After harvesting black gram and green gram crops in kharif season, carry out preparation of the land by giving 3 to 4 harrowing. Apply 10 to 15 carts of well decomposed FYM or compost manure before the last harrowing. The land should be prepared for sowing by removing weeds and stubbles. Use 10 kg certified seed per hectare for sowing of rabi sorghum. For sowing, the spacing between two rows should be 45 cm and between two plants 15 cm. For expected yield of irrigated rabi sorghum, the spacing between two rows should be 45 cm and between two plants 12 cm. For sowing use C.S.H. - 15 R hybrid variety while improved / pure variety PKV Kranti (AKSV 13 R),

Parbhani Moti, CSV-18 (Rabbi Irrigated Variety), CSV- 12, CSV- 29, Phule Vasudha, Phule Suchitra, Phule Revati, Parbhani Super Moti and local varieties are Maldandi: 35-1 and Ringani should be used. Sorghum seeds should be treated with 25 g of Azotobacter, 20 g of Phosphorus Solubilizing Bacteria (PSB) and 4 g of Trichoderma viride per kg of seed. For dryland rabi sorghum, apply 50 kg Nitrogen (N), 25 kg Phosphorous (P) and 25 kg Potassium (K) per hectare at the time of sowing. Sowing should be done across the slope. Considering the available soil moisture and after arrival of Wafsa condition, sowing of rabi sorghum should be done up to 15th October.

**Soybean** : Soybean harvesting and threshing management: Farmers are advised to harvest the crop immediately after attaining the physiological maturity (change in pod colour) and the harvested crop should be stored on elevated field and if threshing is not possible and cover the harvested produce with tarpaulin. Farmers are suggested to allow the harvested crop for sun-drying for 2-3 days. It is also advised to collect the harvested crop and keep it in safe place, covering with Tarpaulin and thresh the same as per the convenience. 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.

**Cotton** : Cotton nutrient management: Spray 2% urea at flowering stage and 2 % DAP at boll development stage of cotton by judging the local clear weather condition.

Cotton square & flower dropping and excess vegetative growth management: It is suggested to spray alpha-NAA 4.5 SL @ 5 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 @ 10 ml/10 litres of water to restrict the excess vegetative growth of cotton by judging the local clear weather condition.

Cotton pink boll worm management: In order to monitor the pink bollworm moth's activity in cotton, used two pheromone trap per acre with active ingredient of pectinolure or gossyplure. Regular observations of moths trapped in pheromone traps should be recorded. As soon as it is observed that the moths have crossed economic threshold level (8 moths per trap per night for three consecutive nights), the recommended chemical pesticides should be applied. Infected rosette flower should be removed and destroyed immediately (Economic Threshold Level- 10 % infested inflorescence flowers). After formation of green bolls, 20 bolls per acre (1 boll per tree) should be monitored randomly every week. (Economic Threshold Level- 10 % affected bolls). Depending on availability, Trichogramma bacterium, a parasitic friendly insect that feeds on eggs, should be release three times at an interval of 15 days during the square formation and flowering stage at the rate of 60,000 per acre. Chemical pesticides should not be used at least one week before and one week after use of biological agents for pest control. Apply neem-based insecticides @50 ml or Chlorpyrifos 20% EC @25 ml or Quinalphos 20 AF @20 ml or Thiodicarb 75 WP @20 g or Profenophos 50 EC @30 ml or Indoxacarb 14.5 SC @5 ml or Emamectin benzoate 5 SG @5 g per 10 litres of water wherever pink bollworm crosses ET by judging the local clear weather condition.

Cotton disease management: As precautionary measure, prophylactic spraying should be done in clear weather after current spell of rain with Copper oxychloride 50 WP @25 g+ [Streptomycin sulphate IP 90% w/w+ Tetracycline hydrochloride IP 10% w/w] @ 1 g in 10 litres of water is suggested during early boll developmental stages for the management of internal boll rot and bacterial leaf blight of cotton. If symptoms of para wilting observed in cotton, farmers are advised to undertake drenching of carbendazim 50 WP @25g + Urea @ 100g in 10 litres of water after current spell of rain.

Cotton sucking pest management:

Infestation of sucking pests (Thrips and Jassid) should be monitored during squaring, flowering and early boll development stages and for their management spray Thiamethoxam 25 WG @ 2 g or Dinotefuran 20 SG @ 3 g or Diafenthiuron 50 WP @ 12 g per 10 litres of water (Knapsack or battery -operated sprayer). If thrips infestation is prominent (vector of TSV disease) then spray Thiamethoxam 25 WG @2 g or Spinetoram 11.7 SC @8.5 ml or Dinotefuran 20 SG @3 g/10 litres of water by judging the local clear weather condition.

- Pigeon pea** : Wilting symptoms may be observed in pigeon pea crop, for its management undertake drenching with copper oxychloride 50 % WP@ 25 g in 10 litres of water during clear weather. Install pheromone traps @ 5/ha for monitoring of Helicoverpa. Monitor for presence of eggs & small larvae.
- Chilli** : In chilli crop undertake spray of Difenconazole 25 EC@ 5 ml OR Azoxystrobin 23% SC@ 10 ml in 10 litres of water for control of dieback and fruit rot disease. Undertake spray after current spell of rains.
- Groundnut** : According to local weather condition, carry out harvesting and keep the harvested produce in safe and dry place.
- Tomato** : In the view of present cloudy and rainy weather, if tomato leaf blight was noticed, spraying should be taken of Mancozeb 75 WP 25 gms or Copper oxychloride 50 WP 25 gms mix with in 10 liters of water. For control of thrips and white fly on tomato crop, spraying should be taken of Thiamethoxam 25% WG 4 gm or Dimethoate 30% EC in 10 ml per 10 liters of water. For management of tomato fruit borer spraying should be taken quinalphos 25 EC 20 ml in 10 litre of water.
- Citrus** : Sowing of seeds of rootstocks of Jambiri/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 pre-harvest 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.
- Paddy** : Paddy stem borer & gall midge management: If Stem borer and Gall midge crossing ETL, Apply Carbofuran 3% G or Fipronil 0.3 % 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.  
Paddy leaf roller/folder management: For management of Leaf roller/folder nitrogenous fertilizers should be used in a balanced manner. Infected leaves wrapped by larvae should be collected and destroyed with larvae. Spray Azadiractin 0.15 % (1500 ppm) @ 30 ml. or lambda cyhalothrin 5 E. C. @ 6 ml. or Chlorantraniliprole 18.5 % SC. @ 3 ml or Thiamethoxam 25 W. G. @ 2 gm by mixing in 10 liters of water.  
Paddy plant hoppers management: For management of plant hoppers, although rice crop is prone to plant hoppers, Azadiractin 0.15% (1500 ppm) @ 30 ml or Metarhizium anisopliae as a bio-insecticide @ 2.5 kg/ha. 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.  
Paddy blast disease management: For management of blast of paddy spray Hexaconazole 5% EC @ 20 ml. or Isoprothiolane 40% EC @ 15 ml or Tebuconazole 25.9% EC @ 15 ml per 10 liters of water during clear weather condition.  
Paddy bacterial leaf blight disease management: For management of Bacterial leaf blight spray Streptocycline 1 to 1.5 gm per 10 liters of water.

**Paddy sheath blight disease management:** For management of Sheath blight spray Tebuconazole 25.9 % EC @ 15 ml or Propiconazole 25% EC @ 10 ml or Hexaconazole 5 EC @ 20 ml by mixing in 10 liters of water.

**Paddy sheath rot disease management:** For management of sheath rot, Spray Hexaconazole 75 WP @ 1.33gm by mixing in 10 liters of water.

**Paddy grain discolouration management:** For management of grain discoloration, While the crop is in flowering stage, spray any one of the following fungicides in the afternoon. Hexaconazole 4% + Zyneb 68% W.P.@ 20 to 25 gm or Tebuconazole 50% + Trifloxystrobin 25% WG. @ 4 gm per 10 liters of water. All spraying operation should be during clear weather condition.

**Linseed** : Dryland linseed should be sown in the first fortnight of October. 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.

#### **Livestock Specific Advisory:**

**Goat** : Due to rainy season, in goat helminthic parasites and coccidia protozoa infection is on rising trend. Therefore, it is recommended to administer anthelmintic and anticoccidial medication.

**Poultry** : Tulsi leaves powder @ 2 gram per days up to 15 days given to poultry to increase immunization power.

#### **General Advisory**

**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.