



Gramin Krishi Mausam Sewa
District Level Agromet Advisory Bulletin
Central Institute for Cotton Research,
Nagpur



Agromet Advisory Bulletin

Date : 18-08-2023

Weather Forecast of District NAGPUR(Maharashtra) Issued On : 2023-08-18(Valid Till 08:30 IST of the next 5 days)

Parameter	2023-08-19	2023-08-20	2023-08-21	2023-08-22	2023-08-23
Rainfall(mm)	60.2	41.9	26.0	19.9	15.1
Tmax(°C)	29.9	29.4	30.0	30.3	30.5
Tmin(°C)	22.1	22.5	22.2	22.7	23.0
RH-I(%)	92	88	86	82	81
RH-II(%)	79	76	75	72	71
Wind Speed(kmph)	14	12	10	11	9
Wind Direction(Degree)	305	267	245	257	277
Cloud Cover(Octa)	7	7	6	7	7

Weather Summary/Alert:

• In Nagpur district, as per the district level value added forecast given by, IMD, RMC, Nagpur, sky will be partially to mainly cloudy during next five days i.e. to 19th to 23rd, August, 2023. • Light to moderate rainfall very likely to occur at most places on 19th, 20th and 21st, August, 2023. • Light to moderate rainfall very likely to occur at many places on 22nd, August, 2023. • Very light to light rainfall very likely to occur at many places on 23rd, August, 2023. • Fall in maximum temperature by 2-4 degrees Celsius during next 24 hours and thereafter no large change. • No large change in Minimum Temperature over Vidarbha during next 4-5 days. • Thunderstorm with lightning likely to occur at isolated pockets on 19th, 20th and 21st, August, 2023. • Heavy to Very Heavy Rainfall likely to occur at isolated pockets on 19th, August, 2023. • Heavy Rainfall likely to occur at isolated pockets on 20th, August, 2023. • As per Extended Range Forecast System, rainfall will be normal whereas maximum and minimum temperature will be normal during the period from 23rd to 29th, August, 2023 over the Vidarbha region.

General Advisory:

• Considering the widespread light to moderate rainfall over the district, it is advised to postpone the intercultural operations (weeding/hoeing), agrochemical's application and fertilizer application in standing crops during next 3-4 days. • Farmers are advised to monitor the crop regularly for insect incidence, disease occurrence and use the suitable recommended control measures thereof in the initial stage itself. • Considering the thunderstorm and lightning forecast, it is advised to carry out emergency farm operations during early morning hours. Carry out farm operations by considering the local weather forecast and warnings. • Take shelter at safe places, it is ensuring to keep maximum distance between two farm labour while working in the field. • Avoid shelter near to water bodies (Lake, Well, River and Moist places) tractors and metal implements. Avoid taking shelter under a tree in any situation as the lightning attracts on tallest object. • In view of the possibility of heavy rains, care should be taken that your animals (cows, buffaloes, goats etc.) do not cross the flowing water.

SMS Advisory:

• It is advised to postpone the intercultural operations (weeding/hoeing), agrochemical's application and fertilizer application in standing crops during next 3-4 days.

Crop Specific Advisory:

Crop(Varieties)	Crop Specific Advisory
COTTON	<ul style="list-style-type: none"> • It is advised to postponedtheintercultural operations (weeding/hoeing), agrochemical's application and fertilizer application in standing crops during next 3-4 days. • In some parts, occurrence of bacterial leaf blight/angular leaf spot disease has been noticed in fields. Spray of copper oxychloride 50 WP/WG @25 g per 10 litres of water is suggested for the management of bacterial leaf blight, • Foliar spray of Carbendazim 50 WP@4 g or Propiconazole 25 EC@ 10 ml or Carbendazim 12%+Mancozeb 63% WP @30 g or Metiram 55% +Pyraclostrobin 5% WG @ 20 g or Azoxystrobin 18.2% w/w + Difenconazole 11.4% w/w SC @10 ml or Fluxapyroxad 167 g/L + Pyraclostrobin 333 g/L SC @6 g per 10 litres of water is recommended for its management. Collection and destruction of diseased crop debris from the field is recommended.
COTTON	<ul style="list-style-type: none"> • It is advised to postponedtheintercultural operations (weeding/hoeing), agrochemical's application and fertilizer application in standing crops during next 3-4 days. • Monitoring of pink bollworm using pheromone traps may be initiated 45 days after sowing. Install pheromone traps @ 5 per hectare for monitoring moth activity of pink bollworm. • Inspect the crop at squaring and flowering stage of the crop for the presence of pink bollworm larvae within flowers. Remove and destroy rosette flowers whenever seen. • Where crop at below 60 days, Spray NSKE 5% + Neem oil 5 ml /litre or neem oil-based formulation 5 ml /litre (300 or 1500 ppm) + 1.0gm laundry detergent emulsion (Initial 1-2 sprays). (NSKE 25L + Neem oil 2.5L +0.5kg laundry detergent emulsion per hectare). Use 150-200 litres of water /acre or 375-500 litre/ ha for dilution of the insecticides.
COTTON	<ul style="list-style-type: none"> • Where the crop is at 60-90 days, if the incidence of jassids was noticed, on crossing ETL, it is advised to spray Flonicamid 50WG @ 4g/10L (200g/ha) Or Dinotefuran 20SG @ 3g/10L (150g/ha) Or Imidacloprid 17.8 SL @ 3ml/10L (150ml/ha) after current spell of rain and during clear and calm weather condition.
COTTON	<ul style="list-style-type: none"> • If the incidence of thrips is noticed due dry spell and hot weather in cotton,on crossing ETL it is advised to spray Thiamethoxam 25% WG @ 2 gm/10L (100g/ha) Or Spinetoram 11.7 SC @ 8.4ml/10L (420 ml/ha) after current spell of rain and during clear and calm weather.
COTTON	<ul style="list-style-type: none"> • Where the crop is at 60-90 days, Install yellow sticky traps @ 20/ha during August for monitoring @ 100/ha for management
SOYABEAN	<ul style="list-style-type: none"> • It is advised to postponedtheintercultural operations (weeding/hoeing), agrochemical's application and fertilizer application in standing crops during next 3-4 days. • Farmers are advised to conduct surveillance of their crop at regular intervals and apply the spray of Tebuconazole 25.9 EC (625 ml/ha) or Tebuconazole 10%+Sulphur 65% WG (1250 g/ha) immediately after the symptoms are seen during calm and clear weather condition. • Farmers are advised to monitor their crop on regular intervals preferably at 3-4 locations in their fields and see whether any insect/pest/caterpillar is there along with their stage. This will facilitate the effective insect control measures. • Farmers are also advised to install bird perches at different locations which facilitate seating arrangement for predatory bird which feed on leaf eating caterpillars. • In case of organic soybean production, farmers are advised to use Bacillus thuringiensis or Beauveria bassiana or Nomuriya rileyi @ 1 l/ha for control of defoliators (semilooper, tobacco caterpillar).
SOYABEAN	<ul style="list-style-type: none"> • Install Yellow Sticky Traps at different locations in the field as preventive measures for control of white fly, a carrier for transmission of YMV diseases. • For control of Yellow Mosaic Virus disease, farmers areadvised to destroy the affected plants as well as spray withany of the recommended pre-mixed insecticides likeThiamethoxam 12.6 % + Lambda Cyhalothrin 9.5 ZC (125ml/ha) or Betacyfluthrin 8.49 % + Imidacloprid 19.81 (350ml/ha). This will also facilitate control of stem fly. • Farmers arealso advised to use yellow sticky traps in order to attract whiteflies, the vector of YMV.
SOYABEAN	<ul style="list-style-type: none"> • It is advised to postponedtheintercultural operations (weeding/hoeing), agrochemical's application and fertilizer application in standing crops during next 3-4 days. • Farmers are advised to spray of pre-mixed formulation of Thiamethoxam 12.60 % + Lambda-cyhalothrin 09.50 % ZC (125 ml/ha) for stemflycontrol by judging the local clear weather condition. • For control of girdle beetle as well as defoliators simultaneously, farmers are advised to apply spray of any one pre-mix insecticide formulations such as Chlorantraniliprole 09.30 % + Lambda cyhalothrin 04.60 % ZC (200 ml/ha) or Thiamethoxam + Lambda Cyhalothrin (125 ml/ha) or Betacyfluthrin + Imidacloprid (350 ml/ha). This is also useful in controlling the infestation of Stem Fly.
SOYABEAN	<ul style="list-style-type: none"> • For control of defoliators like Semilooper, tobacco caterpillar and Heliiothis, farmers are advised to spray any one of the following insecticides: Broflanilide 300 g/l SC (42-62 g/ha) OR Flubendiamide 39.35 % w/w SC (150 ml/ha) OR Indoxacarb 15.80 % EC (333 ml/ha), OR Tetrailiprole 18.18 SC (250-300 ml/ha) OR Novaluron 05.25 % + Indoxacarb 04.50 % SC (825-875 ml/ha) OR Chlorantraniliprole 18.5 % SC (150 ml/ha) OR

Crop(Varieties)	Crop Specific Advisory
	Emamectin benzoate 01.90 % EC (425 ml/ha) OR Flubendiamide 20 % WG (250-300 g/ha) OR Lambda-cyhalothrin 04.90 % CS (300 ml/ha) OR Profenofos 50 % EC (1 l/ha) OR Spinetoram 11.70 % SC (450 ml/ha) OR pre-mixed Beta-cyfluthrin 08.49 % + Imidacloprid 19.81 % w/w OD (350 ml/ha) OR Thiamethoxam 12.60 % + Lambda-cyhalothrin 09.50 % ZC (125 ml/ha) OR Chlorantraniliprole 09.30 % + Lambda-cyhalothrin 04.60 % ZC (200 ml/ha).
RICE	<ul style="list-style-type: none"> • Agriculture is profitable if the soil is tested and proper quantity of chemical fertilizers are used. Generally, apply 100 kg Nitrogen, 50 kg Phosphorus and 50 kg Potash per hectare. Apply whole phosphorus and potash and half the amount of nitrogen in the mud (Puddled field) and the remaining half nitrogen in two equal installments (usually tillering stage which comes at 30 days and panicle initiation stage which comes about 60 days). • Weed Management in paddy: - If transplanting of paddy done at a distance of 15 x 20cm, 20 x 20cm, 20 x 25 cm, they should use Paddy Power Weeder or Cono Weeder. The first weeding should be given 20 days after the crop is well rooted, the second after 45 days and if possible, the third weeding should be given after 60 days. Labours should remove any weeds left near the crop. • Post-emergence: - Bispyribac sodium 10% S.C.@ 6 to 7 ml after 10 to 15 days of transplanting or Butachlor 50% E. W. @ 50 to 60 ml after 10 to 15 days of transplanting or Azimsulfuron 50% DF. @ Spray 2.3 gm after 20 to 25 days of transplanting mixed in 10 liters of water.
RICE	<ul style="list-style-type: none"> • 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. • 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. • Armyworm: - It can be controlled by twisting ropes or tree branches horizontally from the crop. Also, frogs should be reared as frogs eat larvae.
PIGEON PEA (RED GRAM/ARHAR)	<ul style="list-style-type: none"> • It is advised to carried out the intercultural operations (weeding/hoeing), agrochemical's application and fertilizer application in standing crops during next 3-4 days.
CITRUS	<ul style="list-style-type: none"> • It is advised to postponedtheintercultural operations (weeding/hoeing), agrochemical's application and fertilizer application in standing crops during next 3-4 days. • For amba bahar crop of Nagpur mandarin and sweet orange at fruit development stage, apply 50 gm of ferrous sulphate (FeSO₄) and 50 gm of zinc sulphate (ZnSO₄) and 5 kg cow dung or vermicompost along with application of remaining recommended dose of fertilizer. • Where the orchards showing symptoms of greening bacterial infection (dull greenish-yellow color on fruits or reddening of fruit button tissue on green fruits) spraying should be done with tetracycline hydrochloride 600 ppm (60 g/100 liters of water) followed by Streptocycline or K cyclin 150 ppm (1.5 g / 10 liters of water) after 21 days after first spray. • For management of Phytophthora brown blight on fruit. Foliar spraying of Fosetyl Al for at the rate of 2.5 g per liter of water (twice in August and September at an interval of 40 days). • In the root rot affected orchard, apply and spraying should be done of Mefenoxam MZ 2.5 gram per litre of water and 5-10 liters (depending on tree size) per tree or fosetyl aluminium 2.5 g/litre (twice at 40 days interval). All fruits on the affected plants should be removed and then sprayed with a solution of Mefenoxam MZ (2.5 g per liter of water) + Carbendazim (1 g per liter of water). • Carbendazim or thiophanate methyl should be sprayed twice at the rate of 1 gram per liter of water on plants affected by Colletotrichum and Botryodiplodia fungi. After 10 days after the first spraying, the second spraying should be repeated. Azoxystrobin + difenoconazole fungicide 0.5ml per litre of water can be sprayed as an alternative. • Installmethyl eugenol pheromone trap at the rate of 20-25hectare control of for fruit fly. Bait (methyl eugenol) should be changed every 15-20 days. • For the management of fruit sap sucking moth at the time of colour development stage, spraying should be done of Neem oil 10 ml or petroleum spray oil (mineral oil) ml per litre of water 10-15 days interval, till the fruits are harvested. • The fruits fallen under the trees in the garden should be collected and buried in the compost pit. • If there is dry weather for more than a week in September and October with a maximum temperature of 35°C, kaolin should be sprayed at the rate of 40 grams per liter of water.
CITRUS	<ul style="list-style-type: none"> • For the management of spider mite in citrus fruits, abamectin 1.9 EC* or Propargite 57 EC*20 ml or Ethion 50 EC*20 ml orDiafenthion 50 WP* at the rate of 20 g per 10 liters of water should be sprayed alternately at 20-day intervals. • To avoid fruitdrop due to black spot on small fruits due to fruitlet blight disease, spraying should be done of copper oxychloride 50% WP at the rate 25 grams per 10 liters of water.

Horticulture Specific Advisory:

Horticulture(Varieties)	Horticulture Specific Advisory
MANDARIN ORANGE	<ul style="list-style-type: none">• Phytophthora brown rot is a fruit disease usually associated with continuous wet weather and poor water drainage conditions. It commonly appears during late monsoon phase following periods of extended high rainfall. It can be confused with fruit drop from other causes at that time of the year. Symptoms appear primarily on mature or nearly mature fruit. Initially, the firm, leathery lesions have a water-soaked appearance, but they soon turn soft and have a tan to olive brown color and a pungent odor. At high humidity level, fruit surface become covered by a delicate whitish mycelia growth of the fungus. Infected fruit eventually drops. Occasionally, twigs, leaves and blossoms are infected, turning brown and then dying. The most serious aspect of this disease is the fact that fruit infected before harvest may not show symptoms. If infected fruit get mixed with healthy fruits, the disease may spread quickly from fruit to fruit in storage and during transit.• Management of brown rot relies on prevention. Pruning tree skirts 24 or more inches above the ground can significantly reduce brown rot. One spray of copper fungicide (1% Bordeaux mixture or, copper oxychloride @ 3.0 g/ Lit) provides protection throughout the wet season. When rainfall is excessive, you may have to repeat the spray in August or September. It is advised the growers to spray fosetyl Aluminium or mefenoxam MZ @ 2.5g/ Litre of water in the infected orchards, in case of severe disease occurrence. Precautions should also be taken during harvesting not to include brown rot-affected fruits in the crates/ boxes as this could result in rejection at the processing or packing facility.
BRINJAL	<ul style="list-style-type: none">• It is advised to postponed the intercultural operations (weeding/hoeing), agrochemical's application and fertilizer application in standing crops during next 3-4 days.• In the view of cloudy weather, if the incidence of aphids, thrips, whitefly and spider mites on brinjal crop, spraying should be taken 2 weeks after planting with Dimethoate 30 % EC 10 ml or Quinalphos 25 % EC 20 ml or thiometon 25 % EC 10 ml per 10 liters of water.
TOMATO	<ul style="list-style-type: none">• It is advised to postponed the intercultural operations (weeding/hoeing), agrochemical's application and fertilizer application in standing crops during next 3-4 days.• In the view of cloudy 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.

Live Stock Specific Advisory:

Live Stock(Varieties)	Live Stock Specific Advisory
COW	<ul style="list-style-type: none">• 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. Protect young animals from excessive consumption of newly grown green vegetation.
GOAT	<ul style="list-style-type: none">• Vaccinate the goat against FMD, HS, PPR and enterotoxaemia. Offer clean and cold water (stored in earthen pot) to the animals.

Poultry Specific Advisory:

Poultry(Varieties)	Poultry Specific Advisory
BIRD	<ul style="list-style-type: none">• 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	<ul style="list-style-type: none">• 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

Others (Soil / Land Preparation) (Varieties)	Others (Soil / Land Preparation) Specific Advisory
	<p>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.</p>
GENERAL ADVICE	<p>• 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.</p>