



## Agromet Advisory Bulletin

Date : 01-09-2023

Weather Forecast of **NARKHED** Block in **NAGPUR**(Maharashtra) Issued On :2023-09-01(Valid Till 08:30 IST of the next 5 days)

Parameter	2023-09-02	2023-09-03	2023-09-04	2023-09-05	2023-09-06
<b>Rainfall</b>	2.6	10.1	19.7	13.3	58.1
<b>Tmax(°C)</b>	33.3	33.0	32.6	30.8	30.3
<b>Tmin(°C)</b>	23.2	23.0	23.2	23.3	22.2
<b>RH-I(%)</b>	69	72	74	86	95
<b>RH-II(%)</b>	56	57	71	76	80
<b>Wind Speed(kmph)</b>	6	6	6	7	6
<b>Wind Direction(Degree)</b>	342	304	307	304	295
<b>Cloud Cover(Octa)</b>	6	7	8	8	7

### Weather Summary/Alert:

• In Nagpur district, as per the block level value added forecast given by, IMD, RMC, Nagpur, sky will be partially to mostly cloudy during next five days i.e. 02nd to 06th, September, 2023. • Light to moderate rainfall likely to occur on 02nd, 03rd, 04th 05th and 06th, September, 2023. • No large change in Maximum temperature for next 3 days over Vidarbha thereafter fall 2-3 degree Celsius subsequently. • No large change in minimum temperature over Vidarbha during next 4-5 days. • Thunderstorm with lightning likely to occur on 02nd, 03rd, 04th, 05th and 06th, September, 2023. • Heavy rainfall likely to occur on 06th, September, 2023. • As per Extended Range Forecast System, rainfall will be above normal and maximum and minimum temperature will be normal during the period from 06th, to 12th, September, 2023 over the Vidarbha region.

### General Advisory:

• Considering the medium range forecast for Nagpur district and extended range weather forecast for Vidarbha it is advised to postpone the irrigation operation. • By judging the local clear and calm weather condition, it is advised to continue the intercultural operations (weeding/hoeing), agrochemical's application during next 2 days. • Considering the thunderstorm and lightning forecast, it is advised to avoid letting cow, buffalo, goats, sheep, and other cattle's/animals graze in open spaces as there is a possibility of rain and lightning. Animals should be kept away from open water sources, rivers or lakes and tractors and metal. • Considering the thunderstorm and lightning forecast it is advised to carry out 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. • 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.

### SMS Advisory:

• Considering the medium range forecast for Nagpur district and extended range weather forecast for Vidarbha it is advised to postpone the irrigation operation.

### Crop Specific Advisory:

Crop(Varieties)	Crop Specific Advisory
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

Crop(Varieties)	Crop Specific Advisory
	restrict the excess vegetative growth of cotton during next 2 days by judging the local calm and clear weather condition.
COTTON	<ul style="list-style-type: none"> <li>• 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 @ 8.4 ml/10L (420 ml/ha) during next 2 days by judging the local calm and clear weather condition.</li> </ul>
COTTON	<ul style="list-style-type: none"> <li>• 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) during next 2 days by judging the local calm and clear weather condition.</li> </ul>
COTTON	<ul style="list-style-type: none"> <li>• 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.</li> <li>• 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.</li> <li>• 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.</li> </ul>
COTTON	<ul style="list-style-type: none"> <li>• 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. &gt;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 5SG @ 5g/10L (250 g/ha) Or Indoxacarb 14.5 SC @10ml/10L (500ml/ha) Or Chlorpyrifos 20 % EC @ 25ml/10L (1250 ml/ha) during next 2 days by judging the local calm and clear weather condition.</li> </ul>
COTTON	<ul style="list-style-type: none"> <li>• Where the crop is at 60-90 days, Install yellow sticky traps @ 20/ha during August for monitoring and management of white fly @ 100/ha.</li> <li>• If the incidence of white fly nymph is noticed, Pyriproxyfen 10 EC @ 20ml/10L (1000 ml) /ha Or Buprofezin 25 SC @ 20ml/10L (1000 ml/ha) or Spiromesifen 22.9 SC @ 12ml/10L (600 ml/ha).</li> <li>• If the incidence of adult white fly is noticed, on crossing ETL spray Diafenthiuron 50% WP @ 12g/10L (600 g/ha) Or Afidopyropen 50 g/L @ 20ml/10L (1000 ml/ha) Or Dinotefuran 20 SG @ 3g/10L (150g/ha) Or Flonicamid 50 WG @4g/10L (200 g/ha) or Clothianidin 50%WDG 1ml/10L (50ml/ha) during next 2 days by judging the local calm and clear weather condition.</li> </ul>
SOYABEAN	<ul style="list-style-type: none"> <li>• Considering the medium range forecast for Nagpur district and extended range weather forecast for Vidarbha it is advised to postponed the irrigation operation.</li> <li>• By judging the local clear and calm weather condition, it is advised to continue the intercultural operations (weeding/hoeing), agrochemical's application during next 2 days.</li> <li>• Spraying of 2 percent urea at 50 and 70 days crop stage in soybean crop or 2 percent 19:19:19 (water soluble fertilizer) at pod development is beneficial in terms of higher yield.</li> <li>• 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.</li> <li>• Farmers are also advised to install bird perches at different locations which facilitate seating arrangement for predatory bird which feed on leaf eating caterpillars.</li> <li>• 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).</li> <li>• Considering the medium range forecast for Nagpur district and extended range weather forecast for Vidarbha it is advised to postponed the irrigation operation.</li> <li>• By judging the local clear and calm weather condition, it is advised to continue the intercultural operations (weeding/hoeing), agrochemical's application during next 2 days.</li> <li>• Spraying of 2 percent urea at 50 and 70 days crop stage in soybean crop or 2 percent 19:19:19 (water soluble fertilizer) at pod development is beneficial in terms of higher yield.</li> <li>• 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.</li> <li>• Farmers are also advised to install bird perches at different locations which facilitate seating arrangement for predatory bird which feed on leaf eating caterpillars.</li> <li>• 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).</li> </ul>

Crop(Varieties)	Crop Specific Advisory
SOYABEAN	<ul style="list-style-type: none"> <li>• 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.</li> <li>• 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)during next 2 days by judging the local calm and clear weather condition.</li> </ul>
SOYABEAN	<ul style="list-style-type: none"> <li>• 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.</li> <li>• 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 (125 ml/ha) or Betacyfluthrin 8.49 % + Imidacloprid 19.81 (350 ml/ha). This will also facilitate control of stem flyduring next 2 days by judging the local calm and clear weather condition.</li> <li>• Farmers arealso advised to use yellow sticky traps in order to attract whiteflies, the vector of YMV.</li> </ul>
SOYABEAN	<ul style="list-style-type: none"> <li>• For control of defoliators like Semilooper, tobacco caterpillar and Heliothis, 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 Tetraniliprole 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 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)during next 2 days by judging the local calm and clear weather condition.</li> </ul>
RICE	<ul style="list-style-type: none"> <li>• Considering the medium range forecast for Nagpur district and extended range weather forecast for Vidarbha it is advised to postponed the irrigation operation.</li> <li>• By judging the local clear and calm weather condition, it is advised to continue theintercultural operations (weeding/hoeing), agrochemical's application during next 2 days. Chemical Fertilizers: - • 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).</li> <li>• Weed management: - • 1) 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. Labors should remove any weeds left near the crop.</li> <li>• 2) 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.</li> <li>• Pest and disease management: - • 1) 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.</li> <li>• 2) Blast and Neck blast: - Spray Hexaconazole 5% EC @ 20 ml. or Mencozeb 75% @ 30 gm per 10 liters of water.</li> <li>• 3) Bacterial leaf blight: - Spray Copper hydroxide 53.8% DF @ 30 gm + Streptocycline 1.5 gm per 10 liters of water.</li> <li>• Water Management: - • After paddy planting till the roots of the plant are 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.</li> </ul>
CITRUS	<ul style="list-style-type: none"> <li>• Considering the medium range forecast for Nagpur district and extended range weather forecast for Vidarbha it is advised to postponed the irrigation operation.</li> <li>• By judging the local clear and calm weather condition, it is advised to continue theintercultural operations (weeding/hoeing), agrochemical's application during next 2 days.</li> <li>• For ambia bahar crop of Nagpur mandarin and sweet orange at fruit development stage, apply 50 gm of ferrous sulphate (FeSO<sub>4</sub>) and 50 gm of zinc sulphate (ZnSO<sub>4</sub>) and 5 kg cow dung or vermicompost along with application of</li> </ul>

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	<p>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.</p>
CITRUS	<p>• 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 orDiafenthiuron 50 WP* at the rate of 20 g per 10 liters of water should be sprayed alternately at 20-day intervals. • To avoid fruit drop 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.</p>

#### Horticulture Specific Advisory:

Horticulture(Varieties)	Horticulture Specific Advisory
MANDARIN ORANGE	<p>• 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.</p>
BRINJAL	<p>• Considering the medium range forecast for Nagpur district and extended range weather forecast for Vidarbha it is advised to postponed the irrigation operation. • By judging the local clear and calm weather condition, it is advised to continue theintercultural operations (weeding/hoeing), agrochemical's application during next 2 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.</p>

Horticulture(Varieties)	Horticulture Specific Advisory
TOMATO	<ul style="list-style-type: none"> <li>Considering the medium range forecast for Nagpur district and extended range weather forecast for Vidarbha it is advised to postponed the irrigation operation.</li> <li>By judging the local clear and calm weather condition, it is advised to continue the intercultural operations (weeding/hoeing), agrochemical's application during next 2 days.</li> <li>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.</li> <li>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.</li> </ul>

#### Live Stock Specific Advisory:

Live Stock(Varieties)	Live Stock Specific Advisory
COW	<ul style="list-style-type: none"> <li>The floor of the animal shed should be kept dry and clean.</li> <li>The feed and fodder should be stored properly to prevent the growth of moulds.</li> <li>Maintain the surrounding of animal shed clean and hygienic and remove the unwanted vegetation nearby the sheds.</li> <li>Protect young animals from excessive consumption of newly grown green vegetation.</li> </ul>
GOAT	<ul style="list-style-type: none"> <li>Vaccinate the goat against FMD, HS, PPR and enterotoxaemia. Offer clean and cold water (stored in earthen pot) to the animals.</li> </ul>
COW	<ul style="list-style-type: none"> <li><b>Lumpy Skin Disease: Symptoms and Prevention:</b></li> <li><b>Symptoms of Disease:</b> Tumors appear on the head, neck, legs, rump, around the genitals and all over the body of cows, buffaloes and bulls. Scabs cling to the centre of the nodule, eventually fall off and ulcerate there. Swelling of the feet, groin and genitals may occur. Animal stops feeding and cannot walk. Discharge from nose and eyes. Milk production decreases. May cause abortion in pregnant animals.</li> <li><b>Preventive Measures:</b> Cow, buffalo and bull shed should be kept ventilated and clean. The sale and purchase of cows, buffaloes and bulls should be stopped. Animals should be fed healthy and nutritious food. Formalin, phenyl, sodium hypochloride, etc. should be used for regular disinfection of cowsheds. Regular spraying of herds and animals with medicated water containing safe pyrethroid ingredients like cypermethrin, deltamethrin to control ectoparasitic insects (eg flies, mosquitoes, weevils, fleas etc.). Daily burning of neem leaves and fumigation in cowsheds can prevent infestation of parasitic insects like flies, mosquitoes. Immediately isolate the sick animal and seek veterinary assistance for treatment. Vaccinate healthy animals with goat pox vaccine.</li> <li><b>Treatment:</b> There is no specific treatment for this disease. Anti-inflammatory, anti-pyretic, anti-histaminic drugs should be used according to the symptoms. Mineral and vitamin supplements should be given to increase appetite and immunity. Antibiotics may also be used to prevent secondary infection</li> </ul>

#### Poultry Specific Advisory:

Poultry(Varieties)	Poultry Specific Advisory
BIRD	<ul style="list-style-type: none"> <li>Provide nutritious feed and fresh, clean and cold water to the birds.</li> </ul>

#### 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"> <li>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.</li> </ul>