

Gramin Krishi Mausam Sewa District Level Agromet Advisory Bulletin

Central Institute for Cotton Research, Nagpur



Agromet Advisory Bulletin

Date: 06-09-2024

Weather Forecast of District NAGPUR(Maharashtra) Issued On: 2024-09-06(Valid Till 08:30 IST of the next 5 days)

Parameter	2024-09-07	2024-09-08	2024-09-09	2024-09-10	2024-09-11
Rainfall(mm)	27.6	22.3	24.3	12.3	29.5
Tmax(°C)	32.6	32.7	32.4	32.3	30.4
Tmin(°C)	23.7	23.6	23.8	24.2	23.6
RH-I(%)	89	90	92	93	92
RH-II(%)	60	65	73	79	75
Wind Speed(kmph)	9	11	9	11	9
Wind Direction(Degree)	313	315	318	281	287
Cloud Cover(Octa)	7	7	8	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 07th to 11th, September, 2024. • Light to moderate rainfall very likely to occur at many places on 07th, 08th, 10th and 11th, September, 2024. • Light to moderate rainfall very likely to occur at most places on 09th, September, 2024. • Thunderstorm with lightning likely to occur at isolated pockets on 08th, 09th, 10th and 11th, September, 2024. • As per Extended Range Forecast System, rainfall will be above normal whereas maximum temperature is likely to be below normal and minimum temperature will be normal during the period from 08th to 14th, September, 2024 over the Vidarbha region.

General Advisory:

• It is advised to carry out agrochemical spraying operations, fertilizer application in standing crops and intercultural operations (weeding/hoeing) during next 2 days by judging local clear and calm weather condition. • If rainwater has accumulated in the crop area due to rains during the previous week, the excess rainwater should be drained and also considering the forecast of the next rain, care should be taken that the rain water does not accumulate in the crop area for a long time. • 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. • Open the furrow to drain out excess rain water from the crop field to avoid the water stagnation, in view of expected rainfall. • Cows, buffaloes, goats, sheep and other domestic animals should be avoided to graze in the open spaces on days when thunder is predicted. Animals should be kept away from open water sources, rivers or lakes and away from tractors and other metal implements. Sufficient fodder and water should be arranged for the animals in the manger. Farmers and farm labourers should take care of themselves and livestock keeping in mind the forecast of lightning. Sheltering under trees should be strictly avoided and also livestock should not shelter under trees.

SMS Advisory:

• It is advised to carry out the harvesting of matured green gram and allow harvested produce for drying under shed after current spell of rain.

Crop Specific Advisory:

Crop (Stage)	Crop Specific Advisory
GREEN GRAM	• It is advised to carry out the harvesting of matured green gram and allow
	harvested produce for drying under shed after current spell of rain.
SOYABEAN	• If the incidence of Girdle beetle was observed in soybean, farmers are advised for destruction of affected plant/part as well as on crossing ETL spraying with any one of Thiacloprid 21.7 S.C. (750 ml/ha) OR Emamectin benzoate 01.90 % EC (425 ml/ha) OR Isocycloseram 9.2% W/W Dc (10% W/V) DC (600 ml/ha) OR Cartap Hydrochloride 04 % + Fipronil 00.50 % CG (200 ml/ha) OR Acetamiprid 25% + Bifenthrin 25 % WG (250 g/ha) OR Tetraniliprole 18.18 SC (250-300 ml/ha) OR Profenophos 50 E.C. (1 l/ha) OR Chlorantraniliprole 18.50 % SC (150 ml/ha). • If the incidence of Tobacco leaf eating caterpillar was observed in soybean, on crossing ETL, farmers are advised to apply the spray of any of the following insecticide, Emamectin benzoate 01.90 % EC (425 ml/ha) OR Broflanilide 300 g/l SC (42-62 g/ha) OR Acetamiprid 25% + Bifenthrin 25 % WG (250 g/ha) OR Flubendiamide 20 % WG (250-300 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 Spinoteram 11.7 SC (450 ml/ha) OR Novaluron + Indoxacarb 04.50% SC (825-875 ml/ha).
RICE	• 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). • Pest and disease management: • 1) Stem borer control: Regular inspection of crop should be done at least 3-4 times in a season. • 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. • Biofungicidal agent like Metarhizium, Beauveria @ 40 g per 10 liters of water should be used. • Azadirachtin 0.15% @ 30 to 50 ml as soon as 5 percent of the affected plants are seen in the field. or Quinalphos 25 % @ 26 ml. or Carbosulfan 25 % @16 ml. or Chlorantraniliprole 18.5% SC @ 3 ml per 10 liters of water. or Carbofuron 3 % G @25 kg/ha. or Fipronil 0.3 % G @16.67 kg. / ha. Apply it in the paddy bunds. or As soon as 10% infested tillers appears in the field 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. • While using chemical pesticides, one should use all safety precautions. • 2) Blast and Neck blast: - Spray Hexaconazole 5% EC @ 20 ml. or Mencozeb 75% @ 30 gm per 10 liters of water. • 3) Bacterial leaf blight: - Spray Copper hydroxide 53.8% DF @ 30 gm + Streptocycline 1.5 gm per 10 liters of water. • Water Management: 1) 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.
COTTON	• If rainwater has accumulated in the crop area due to rains during the previous week, the excess rainwater should be drained and also considering the forecast of the next rain, care should be taken that the rain water does not accumulate in the crop area for a long time. • 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 after 3-4 days and current spell of rain by judging the local calm and clear weather condition.
COTTON	• 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/10L (420 ml/ha) after 3-4 days and current spell of rain by judging the local calm and clear weather condition. • 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 3-4 days and current spell of rain by judging the local calm and clear weather condition. • If the incidence of white fly nymph is noticed, Pyriproxyfen 10

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	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). • 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) after 3-4 days and current spell of rain by judging the local calm and clear weather condition.
	• 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. • 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 5SG @ 5g/10L (250 g/ha) Or Indoxacarb 14.5 SC @10ml/10L (500ml/ha) Or Chlorpyriphos 20 % EC @ 25ml/10L (1250 ml/ha) after 3-4 days and current spell of rain by judging the local calm and clear weather condition.

Horticulture Specific Advisory:

Horticulture (Stage)	Horticulture Specific Advisory
MANDARIN ORANGE	• Fruit fly- To attract fruit fly males, fruit fly traps (methyl eugenol) at the rate of 25 per hectare should be hung on trees in the orchard about 2 months before harvesting. The fallen fruits in the orchard should be picked and destroyed and the orchards should be kept clean. The pupal stage of the fruit fly is 2 to 3 cm deep in the soil. The soil under the tree should be moved or hand weeding. • Fruit Sucking Moth- To manage Fruit Sucking Moth it is advised to destroy host weed other than Citrus crop e.g. Gulvel, Vasanvel, Chandvel etc. The larval stage of this pest lives on the host plants. Generally, in the evening time (7 to 11 pm) the grass should be burnt and smoked on the orchard's embankment. At the time of fruit ripening, a mercury lamp should be placed in the four corners of the garden as well as in the centre and kerosene should be poured in a wide vessel under the lamp. Prepare poisonous baits for fruit sucking moths and keep them in the garden. For this Malathion 50 EC 20 ml + 200 gm jaggery + fallen fruit juice (400 to 500 ml) mixed with 2 liters of water and put two baits each in two wide mouth bottles and keep one in every 25 to 30 plants. When the fruit turns from green to yellowish colour, spray with Nimboli oil (neem oil) or mineral oil mixed with 10 ml per liter of water at an interval of 10-15 days until the fruit is harvested. The fallen fruits in the orchards should be picked and buried in gravel to keep the garden clean. • (Note: • Label claim is not recommended; based on research, # Central Pesticides Board, New Delhi recommended) (Source: AICRP on Fruits, Dr. PDKV, Akola)
	• Colletotrichum stem end rot or "Deth Sukhi"- For fruit rot caused by Colletotrichum stem end rot, spray Bordeaux mixture 0.6 per cent or copper oxychloride 50 WP * 2.5 g per liter or Azoxystrobin + Difenconazole 1 ml per liter of water. • Greasy Spot- For faster decomposition of fallen leaf litter, other beneficial fungi (bio-decomposer mixed with cow dung (1 kg / tree)) should be used. Zineb * 68 % (20 g/10 liter of water) or horticultural mineral oil @ 2 % 200 ml / 10 liters of water) or pre-mixed fungicide Hexaconazole 4% + Zineb 68 % WP @ 15 gm / 10 liters of water should be sprayed. Application of mineral oil or fungicides reduces spore penetration into the leaf and also reduces spore germination. If the fungus is infected, the development of symptoms is prevented or delayed as well as the severity of the oily spot. • Brown rot (brown rot on fruit) - First of all, fallen leaves and

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	fruits should be disposed of on the trees and not allowed to remain in the field, otherwise the disease will increase in severity and spread rapidly. Keep beds clean. Do not place piles of fruit anywhere in the orchard as they serve to spread disease. As a preventative measure to prevent leaf drop and fruit rot caused by Phytophthora fungus, whole plant should be sprayed with Fosetyl AL* 2.5 gm or copper oxychloride * 50 WP 3 gm per liter of water. While spraying, the perimeter of the tree should also be sprayed to kill the fungus on the fallen fruits if they are not picked and also help to kill the active spores in the soil. Do not mix any other similar fungicides/insecticides/ soluble fertilizers with these agrochemicals for better results. In case of root infestation of Phytophthora fungus Cymoxanil 8 + Mancozeb 64 % WP* (mixed component) fungicide 25 gms in 10 liters of water and 2.5 ml of linseed oil in this mixture should be mixed or Metalaxyl-m 3.3 + Chlorothalonil 33.1 SC* (fungicide with mixed ingredients) 20 ml should be mixed with 10 liters of water and the solution should be apply on beds. (Note: Label claim is not recommended; based on research, # Central Pesticides Board, New Delhi recommended) (Source: AICRP on Fruits, Dr. PDKV, Akola)
BRINJAL	• Due to rainfall, higher humidity and cloudy weather condition in last, 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.

Live Stock Specific Advisory:

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cow	• A full-grown milch animal should be given 24 to 25 kg of green fodder and 5 to 6 kg of dry fodder per day. 12 to 13 kg of monocot fodder such as millet, maize, oat, Napier etc. and dicot fodder such as garlic grass, chawli etc. should be included in the diet of the animal. • 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	• 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	Poultry Specific Advisory
CHICKEN	 Provide nutritious feed and fresh, clean and cold water to the birds.