

# **All India Coordinated Research Project on Agrometeorology**

## **CRIDA, Santoshnagar, Hyderabad – 500 059**

### **Daily Crop Weather Information as on 22 February 2022**

**Attention: Rajiv Maheshwari, OSD, ICAR**

#### **Significant Weather Features (IMD)**

- Weather Systems and associated forecast & warnings:
- Under the influence of the Western Disturbance as a cyclonic circulation over northwest Afghanistan in middle tropospheric levels and induced cyclonic circulation over south Pakistan & adjoining West Rajasthan at lower tropospheric levels and another approaching Western Disturbance from 25th February, 2022:
  - i) Fairly widespread to widespread light/moderate rainfall/snowfall very likely over Jammu-Kashmir-Gilgit-Baltistan-Muzaffarabad, Himachal Pradesh and Uttarakhand during next 2 days and scattered rainfall/snowfall for subsequent 03 days. Isolated thunderstorm & lightning activity likely over the region during next 2 days. Isolated heavy rainfall/snowfall also likely over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad on today, the 22nd February.
  - ii) Isolated light rainfall very likely over north Punjab, north Haryana & Chandigarh during next 5 days; over Uttar Pradesh during 24th-26th and over north Rajasthan on 22nd February, 2022. Isolated thunderstorm & lightning activity likely over north Punjab, north Haryana & Chandigarh during next 2 days. Strong surface winds (25-35 kmph) very likely to prevail over Punjab, Haryana-Chandigarh-Delhi, East Rajasthan & West Uttar Pradesh on 22nd February 2022. Dust raising winds (25-35 kmph) also very likely to prevail over West Rajasthan on 22nd February, 2022.
- Isolated to scattered light/moderate rainfall very likely over Bihar, Jharkhand, Odisha and West Bengal & Sikkim; scattered to fairly widespread rainfall over Arunachal Pradesh, Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura during 24th & 26th February with thunderstorm & lightning activity over the region on 25th February, 2022.
- The images showing the latest satellite picture in the figure. 1.

#### **Main Weather Observations (IMD)**

- Rainfall/thundershower observed (from 0830 of yesterday to 0830 hours IST of today): at a few places over Arunachal Pradesh, Assam & Meghalaya and

Nagaland, Manipur, Mizoram & Tripura and at isolated places over Jammu-Kashmir-Gilgit-Baltistan-Muzaffarabad, Sub-Himalayan West Bengal, Assam & Meghalaya and Andaman & Nicobar Islands.

- Thunderstorm observed (from 0830 hours IST of yesterday to 0830 hours IST of today): at isolated places over Sub-Himalayan West Bengal-Sikkim.
- Minimum Temperature Departures (as on 22-02-2022): Minimum temperatures are appreciably above normal (3.1°C to 5.0°C) at isolated places over Rajasthan and Saurashtra & Kutch; above normal (1.6°C to 3.0°C) at a few places over Jammu & Kashmir, Himachal Pradesh, Punjab, Haryana, Chandigarh & Delhi and at isolated places over Madhya Pradesh, Madhya Maharashtra and Rayalaseema. They are appreciably below normal (-3.1°C to -5.0°C) at isolated places over Vidarbha, Telangana and Assam & Meghalaya; below normal (-1.6°C to -3.0°C) at a few places over Konkan & Goa, West Bengal & Sikkim, North Interior Karnataka, Chhattisgarh, Jharkhand and Nagaland, Manipur, Mizoram & Tripura and at isolated places over Bihar, Odisha and Andaman & Nicobar Islands and near normal over rest parts of the country. Today, the lowest minimum temperature of 7.0°C is reported at Sikar(East Rajasthan) over the plains of the country.
- Maximum Temperature Departures (as on 21-02-2022): Maximum temperatures were markedly above normal (5.0°C or more) at most places over West Rajasthan; appreciably above normal (3.1°C to 5.0°C) at many places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Himachal Pradesh and East Rajasthan; above normal (1.6°C to 3.0°C) at a few places over Gujarat state, West Madhya Pradesh, Coastal Karnataka, Kerala-Mahe, Coastal Andhra Pradesh-Yanam and Tamil Nadu-Puducherry-Karaikal. They were markedly below normal (-5.0°C or less) at most places over Arunachal Pradesh and Assam-Meghalaya; appreciably below normal (-3.1°C to -5.0°C) at many places over Sub-Himalayan West Bengal & Sikkim; at a few places over Nagaland, Manipur, Mizoram & Tripura and at isolated places over East Uttar Pradesh and Odisha; below normal (-1.6°C to -3.0°C) at many places over Chhattisgarh; at a few places over Gangetic West Bengal and Andaman & Nicobar Islands and at isolated places over Bihar and East Madhya Pradesh and near normal over rest parts of the country. Yesterday, the highest maximum temperature of 37.1°C was reported at Tirupathi (Rayalaseema) over the country.

### **Weather Warning during the next 5 days (IMD)**

- 22 February (Day 1): Thunderstorm accompanied with lightning & gusty winds (speed reaching 30-40 kmph) at isolated places very likely over north Punjab and north Haryana-Chandigarh and with lightning at isolated places over Jammu-

Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Himachal Pradesh, Uttarakhand and Kerala & Mahe. Heavy Rainfall/Snowfall at isolated places very likely over Jammu division.

- 23 February (Day 2): Thunderstorm accompanied with lightning at isolated places very likely over Jammu- Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Himachal Pradesh, Uttarakhand, north Punjab and north Haryana & Chandigarh.
- 24 February (Day 3): Thunderstorm accompanied with lightning at isolated places very likely over Bihar, Gangetic West Bengal & Sikkim, Kerala & Mahe and Tamilnadu, Puducherry & Karaikal.
- 25 February (Day 4): Thunderstorm accompanied with lightning at isolated places likely over Bihar, Odisha, West Bengal & Sikkim, Jharkhand, Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura.
- 26 February (Day 5): Thunderstorm accompanied with lightning at isolated places likely over Jharkhand, Arunachal Pradesh and Assam & Meghalaya.
- The weather outlook for seven days i.e., 22 Feb to 02 Mar 2022 forecasted (Provided by Real-Time Weather Forecasts from NOAA/NCEP collected from <http://monsoondata.org/wx2/>) rain/thundershower may occur over Some parts of Extreme northern parts of India. (Fig. 2).

## Agricultural activities (AICRPAM-CRIDA)

### **Tamil nadu**

#### **Weather condition:**

Maximum temperature: 33.1°C (normal 34.2°C), minimum temperature: 22.4°C (normal 19.2°C), rainfall: 0.0 mm (normal 2.2 mm). The maximum and minimum temperature was 1.1°C and 3.2°C below & above normal respectively and the rainfall was 2.2 mm below normal across the week. Minimum temperature range of 18°C - 26°C prevailed over the state except Kodaikanal and Uthagamandalam (06°C - 11°C) during the period under report. -Maximum temperature range of 25°C - 35°C prevailed over the state except Kodaikanal and Uthagamandalam (15°C - 21°C) during the period under report. With respect to daily rainfall, rainfall occurred at isolated places over Tamil Nadu on 12.02.2022, 13.02.2022, 14.02.2022, 15.02.2022, 16.02.2022 and 17.02.2022 during this week.

#### **Contingency measure:**

- Irrigated crops -Water management -Increase in mean daily temperature will lead to crop stress. Hence, farmers are advised to irrigate the crop at regular interval.
- Rainfed and Irrigated crops- All the stage -Sucking pest infection is noticed under increased temperature. Farmers are advised to go for plant protection and

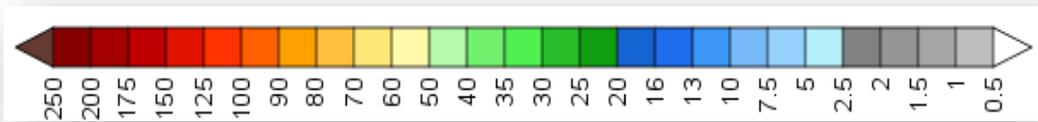
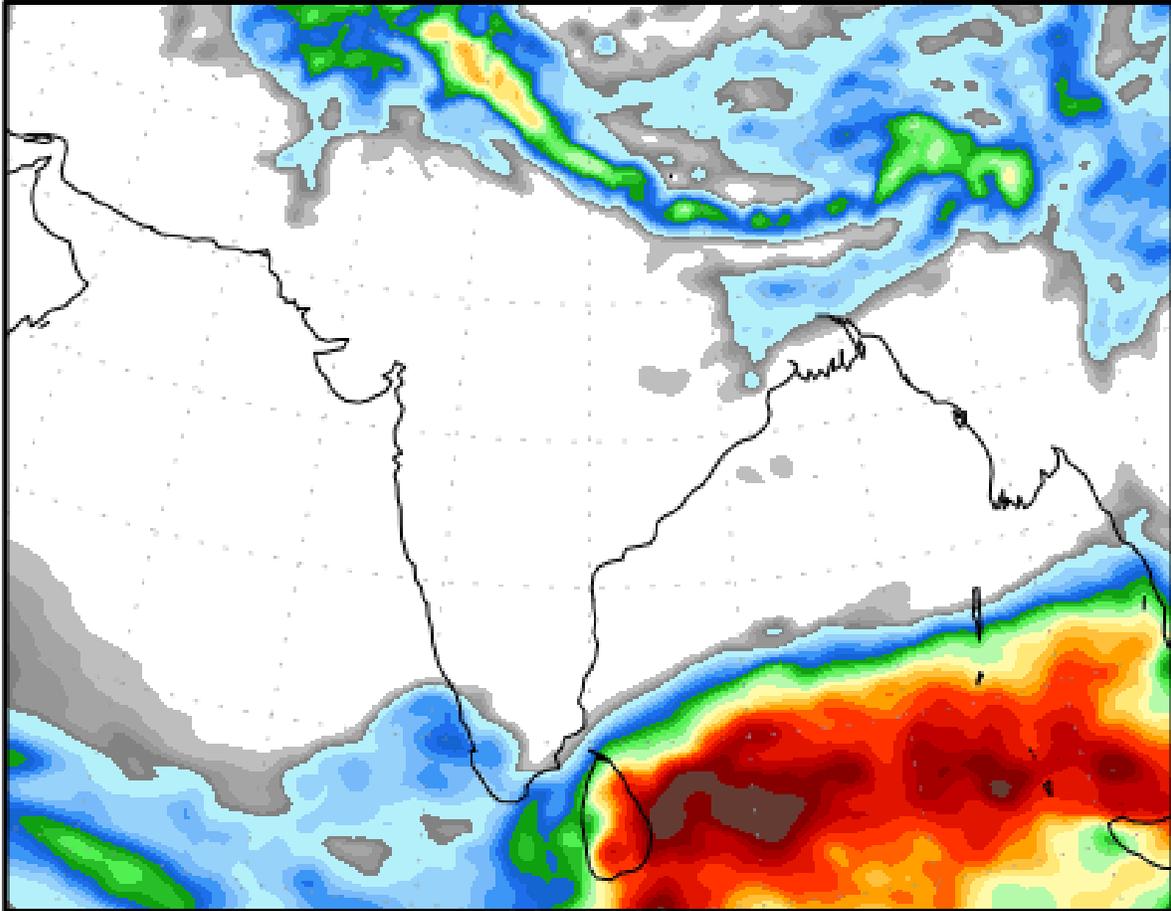
nutrient spray based on crop specific and stage.

- Paddy -Panicle initiation stage- Prevailed weather is conducive for Leaf folder and Stem borer. So farmers are advised to spray Azadirachtin 0.03% 1000ml/ha. (or) Chlorontrinirole 18.5%SC @ 150g/ha. (or) Thiamethoxam 25% WG @ 100g/ha. Under prevailed weather, deficiency symptom is noticed. Farmers are advised to go for foliar fertilizers like Polyfeed (19:19:19) to provide crop nutrients.
- Chilli -Flowering and fruiting stage- Prevailing weather is conducive for Fruit Rot and Die Back diseases. The first spraying should be given just before flowering and the second at the time of fruit formation. Third spraying may be given a fortnight after second spraying. Chemicals like wettable sulphur 0.2%, copper oxychloride 0.25% and Zineb 0.15% not only reduced the disease incidence but also increased the yield of fruits. Prevailing weather is conducive for Gram caterpillar @ Emamectin benzoate 5 % SG @ 4 g/10 lit.
- Coconut -All stages -Rugose Spiralling whitefly is noticed in the prevailed weather condition. Application of water, maida solution as spray in order to increase the population of Encarsia parasitic. Also keep yellow stick trap.
- Guava- Fruiting stage- Prevailing weather condition is conducive for Fruit fly, to control spray malathion 50 EC @2ml/litre or Dimethoate 30 EC @ 1ml/litre.
- Jasmine -Flowering stage -Prevailing weather is conducive for Blossom midge. Spray Thiamethoxam 2.5% WG @ 0.75 g/litre (or) Novaluron 3ml/lit. of water.
- Citrus- Citrus Canker -The prevailing weather condition is conducive for incidence of citrus canker disease, spray of Copper oxychloride (COC) @ 0.3% followed by 4 sprayings with Streptocyclin 100 ppm + COC @ 0.3 % at monthly intervals after pruning.
- Livestock -Chick -Summer Management in Poultry:Heat stress in poultry especially broilers lead to huge economic loss. Signs of Heat stress: 1. Less feed intake 2. Poor growth rate 3. High mortality. Management: 1. Long axis of the poultry house should be in east-west direction. 2. Poultry house should have a width not more than 22-25 ft-to allow ample ventilation. 3. Wet gunny bags should be arranged on the sides of the poultry house to prevent the entry of direct sun-rays into the shed. 4. Feeding should be done in cool hours of the day. 5. Vitamin C supplementation should be done. 6. Cool drinking water should be provided. 7. Addition of B-complex vitamins and electrolytes in the water will help to overcome the Heat Stress. 9. Space allowance to the birds may be increased to 20% to reduce stocking density.
- Dairy animals - Farmers may provide 30-50 gram of mineral mixture per animal to improve the production and health status. To avoid parasitic infestation in

diary animals farmers are advised to deworm and detick the animals in nearby veterinary dispensary.

- Common Fish - Farmers are advised to measure the pond water pH daily and apply dolomite lime at 150 kg/ ha may be applied at a weekly interval. Farmers are advised to add 1-3% of fish oil in daily fish feed to enhance the feed intake and fat content supplements.
- Banana- All stages- Under prevailing weather condition Wilt disease noticed. Soil drenching of Carbendazim 0.1 per cent solution around the pseudostem at bimonthly intervals starting from five months after planting.





**Figure:2. Precipitation forecast for 22 Feb to 02 Mar 2022 (Source: NOAA NCEP).**

*Disclaimer: The predictability of weather depends on many dynamic factors. The success of Agromet advisories provided here depends on the accuracy of the forecasts. In no event will India Meteorological Department (IMD) and Indian Council of Agricultural Research (ICAR) be liable to the user or any third party for any direct, indirect, incidental, consequential, special or exemplary damages or lost profit resulting from any use or misuse of the information on this bulletin.*