

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

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

### **Daily Crop Weather Information as on 09 February 2021**

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

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

- A Western Disturbance lies as a cyclonic circulation at 3.1 km above mean sea level over northeast Afghanistan & adjoining Pakistan with the trough aloft in mid & upper tropospheric westerlies with its axis at 5.8 km above mean sea level roughly along longitude 66°E to the north of latitude 32°N. Under its influence, isolated rainfall/snowfall likely over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad and Himachal Pradesh on 09th February and over northern parts of Uttarakhand on 09th & 10th February, 2021.
- Dense to very dense fog in isolated pockets very likely over Uttarakhand, Punjab, Haryana, Chandigarh & Delhi and West Uttar Pradesh in the morning hours of 10th & 11th February, 2021 and reduce in spatial distribution and intensity thereafter.
- The images showing the latest satellite picture in the figure. 1.

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

- Rain/Thundershowers observed (during 0830 hours IST of yesterday to 0830 hours IST of today): at isolated places over Andaman & Nicobar Islands.
- Today, Cold Wave conditions observed at isolated places over Madhya Pradesh, Chhattisgarh and Odisha.
- Fog recorded (at 0830 hours IST of today): Dense to Very Dense Fog in many pockets over Punjab; Moderate to Dense fog in some pockets over Haryana & Delhi and in isolated pockets over Uttarakhand and Shallow Fog in isolated pockets over Uttar Pradesh and Bihar.
- Maximum Temperature Departures as on 08-02-2021: Maximum temperatures were markedly above normal (5.1°C or more) at many places over Himachal Pradesh; appreciably above normal (3.1°C to 5.0°C) at most places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, West Rajasthan and Konkan & Goa; at many places over Uttarakhand, Coastal Karnataka, Sub-Himalayan West Bengal & Sikkim, Assam & Meghalaya and Arunachal Pradesh; above normal (1.6°C to 3.0°C) at most places over Saurashtra & Kutch and Kerala; at

many places over East Rajasthan and Nagaland, Manipur, Mizoram & Tripura, at a few places over Punjab, Haryana, Chandigarh & Delhi, East Uttar Pradesh and Gujarat Region, and at isolated places over West Madhya Pradesh and Bihar. They were below normal ( $-1.6^{\circ}\text{C}$  to  $-3.0^{\circ}\text{C}$ ) at many places over Madhya Maharashtra and Rayalseema; at a few places over Andaman & Nicobar Islands, and Telangana and at isolated places over Gangetic West Bengal, East Madhya Pradesh, Vidarbha, Tamil Nadu, Puducherry & Karaikal and Coastal Andhra Pradesh & Yanam and near normal over rest parts of the country. Yesterday, the highest maximum temperature of  $37.1^{\circ}\text{C}$  was reported at Vengurla (Konkan & Goa) and Karwar (Coastal Karnataka) over the country.

- Minimum Temperature Departures as on 09-02-2021: Minimum temperatures are appreciably above normal ( $3.1^{\circ}\text{C}$  to  $5.0^{\circ}\text{C}$ ) at isolated places over Himachal Pradesh; above normal ( $1.6^{\circ}\text{C}$  to  $3.0^{\circ}\text{C}$ ) at many places over West Rajasthan; at isolated places over Andaman & Nicobar Islands and Coastal Karnataka. They are markedly below normal ( $-5.1^{\circ}\text{C}$  or less) at isolated places over Madhya Maharashtra, Vidarbha, Telangana and Chhattisgarh; appreciably below normal ( $-3.1^{\circ}\text{C}$  to  $-5.0^{\circ}\text{C}$ ) at many places over Odisha and Marathawada; at a few places over East Madhya Pradesh and Gangetic West Bengal; at isolated places over West Madhya Pradesh and Coastal Andhra Pradesh & Yanam; below normal ( $-1.6^{\circ}\text{C}$  to  $-3.0^{\circ}\text{C}$ ) at most places over Jharkhand; at many places over Rayalseema; at a few places over Saurashtra & Kutch, Sub-Himalayan West Bengal & Sikkim and Interior Karnataka; at isolated places over Haryana, Chandigarh & Delhi, Gujarat region, East Rajasthan, East Uttar Pradesh, Bihar, Kerala & Mahe and Tamil Nadu, Puducherry & Karaikal and near normal over rest parts of the country. The lowest minimum temperature of  $5.2^{\circ}\text{C}$  reported at Hissar (Haryana) over the plains of the country.

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

- 09 February (Day 1): Dense to very Dense Fog in isolated pockets very likely over Punjab, Haryana, Chandigarh & Delhi, Uttarakhand and West Uttar Pradesh. Cold Wave conditions very likely in isolated pockets over Odisha. Strong Winds (speed reaching 45-55 kmph) very likely over Gulf of Mannar and Comorin area. Fishermen are advised not to venture into these areas.
- 10 February (Day 2): Dense Fog in isolated pockets very likely over Punjab, Haryana, Chandigarh & Delhi, Uttarakhand and West Uttar Pradesh. Strong Winds (speed reaching 45-55 kmph) very likely over Gulf of Mannar and Comorin area. Fishermen are advised not to venture into these areas.
- 11 February (Day 3): No weather warning.

- 12 February (Day 4): No weather warning.
- 13 February (Day 5): No weather warning.
- The weather outlook for seven days i.e., 09 to 17 February 2021 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)**

### **Konkan region**

#### **Weather condition:**

Atmospheric condition was cloudy during morning hours around Dapoli during last week. Therefore 7.6 to 9.2 Bright sunshine hours was recorded during last week. During last week 0.0 mm rainfall was recorded at Agrometeorological observatory, Dr. B.S.K.K.V. Dapoli. The maximum and minimum temperature ranged from 30.2 to 33.3 and 11.1 to 14.5 oC respectively. Wind velocity ranged from 2.5 to 3.2 km and wind was blowing from south westerly Direction.

#### **Contingency measure:**

- **Mango:**For increasing the production and quality improvement of mango fruits, spray 1 % Potassium nitrate at pea marble and arecanut size stage of mango fruits.The pre-harvest bagging with newspaper bag of size 25 X 20 cm at marble to egg stage as per recommendation of D.B.S.K.K.V. helps to reduce the fruit drop, increases the fruit weight, pulp weight, produce spongy tissue free fruit, controls attack of fruit fly on fruits and produces spotless fruits of mango.Spraying of 55% cow urine at pea size fruits of mango 3 to 6 sprays at weekly interval as per availability is suggested for increasing yield of mango.To prevent the recurrent flowering in fruit bearing mango tree, spray gibberellic acid 50 PPM (1 gram per 20 liter of water 1st spray at the time of flower opening and then mustard sizes fruit stage.There is forecast for decrease in humidity during next five days, hence to minimize the pre-mature fruit drop of mango, apply 150 to 200 liter of water per tree after fruit setting at 15 days interval for 3 to 4 times also use straw mulch to reduce evaporation losses.There is possibility incidence of hoppers, midge fly and powdery mildew disease on mango inflorescence. For management of pest and disease, spray of Imidacloprid 17.8% SL @ 6 ml per 10 liter of water before the flower opening to avoid the adverse effect on pollinators.

Also add Hexaconazole 5% @ 5 ml or wettable Sulphur 80% @ 20 gm per 10 liter in water for control of powdery mildew disease during clear weather. Note: avoid spraying during flowering to fruit setting period for effective pollination. If it is not possible to postpone the spraying till fruit set due to heavy incidence of insect and pest, then avoid spraying during morning hours (9.00 am to 12.00 pm) which is active period of pollinators for pollination. There is possibility of incidence of thrips on mango inflorescence and fruit, if incidence is noticed, spray Spinosad 45%SC @ 2.5 gms per 10 liter of water. To protect the pea size fruits of mango from hoppers, thrips and powdery mildew diseases, as per blossom protection schedule for mango crop, take a fourth spray of Thiomethoxam 25%WG @ 1 gm per 10 liter of water (15 days after 3rd spray) Also add Hexaconazole 5% @ 5 ml or wettable Sulphur 80% @ 20 gm per 10 liter in water for control of powdery mildew. for control premature fruit drop add 2% urea @20 gms per liter of water in to the insecticide solution. The recommended dose of insecticides is applicable for manually operating sprayer.

- **Cashewnut:** There is possibility of incidence of tea mosquito bugs and thrips on the fruits of cashewnut, to protect the cashew during fruit bearing stage, spray Lambda cyhalothrin 5% EC @6 ml or Acetamiprid 20%SP @ 5 gms per 10 liter of water during clear weather. (insecticide is not under label claim). There is possibility for incidence of cashew apple and nut borer, if incidence is noticed spray Profenophos 50%EC @ 15 ml per 10 liter of water. For increasing yield and size of cashewnut, spray entire tree with 25% cow urine @ 5 lit per tree and drench the solution of 25% cow urine @ 10 liter per tree at a monthly interval from vegetative flush stage for 4 times.
- **Coconut:** Apply 3rd split dose of fertilizers of 750 gm urea and 667 gm muriate of potash in circular basin to above five-year-old coconut palm. Apply 1/5th, 2/5th, 3/5th and 4/5th of above-mentioned fertilizer dose per tree for 1,2,3 and 4-year-old coconut plantation, respectively. Apply 10 kg neem cake and micro nutrients (zinc, boron, molybdenum and copper) 200 gms per plant at the time of 2nd to 3rd split dose of fertilizer.
- **Lablab bean:** Provide irrigation to lablab bean crop where crop is in flowering to pod filling stage. There is possibility of incidence of aphids on lablab crop grown on residual moisture which develop into growth of black fungus on leaves and inflorescence. If incidence is noticed, spray Dimethoate 30%EC@12 ml per 10 liter of water.
- **Chilli:** There is possibility of incidence of leaf curl disease in chilli due to

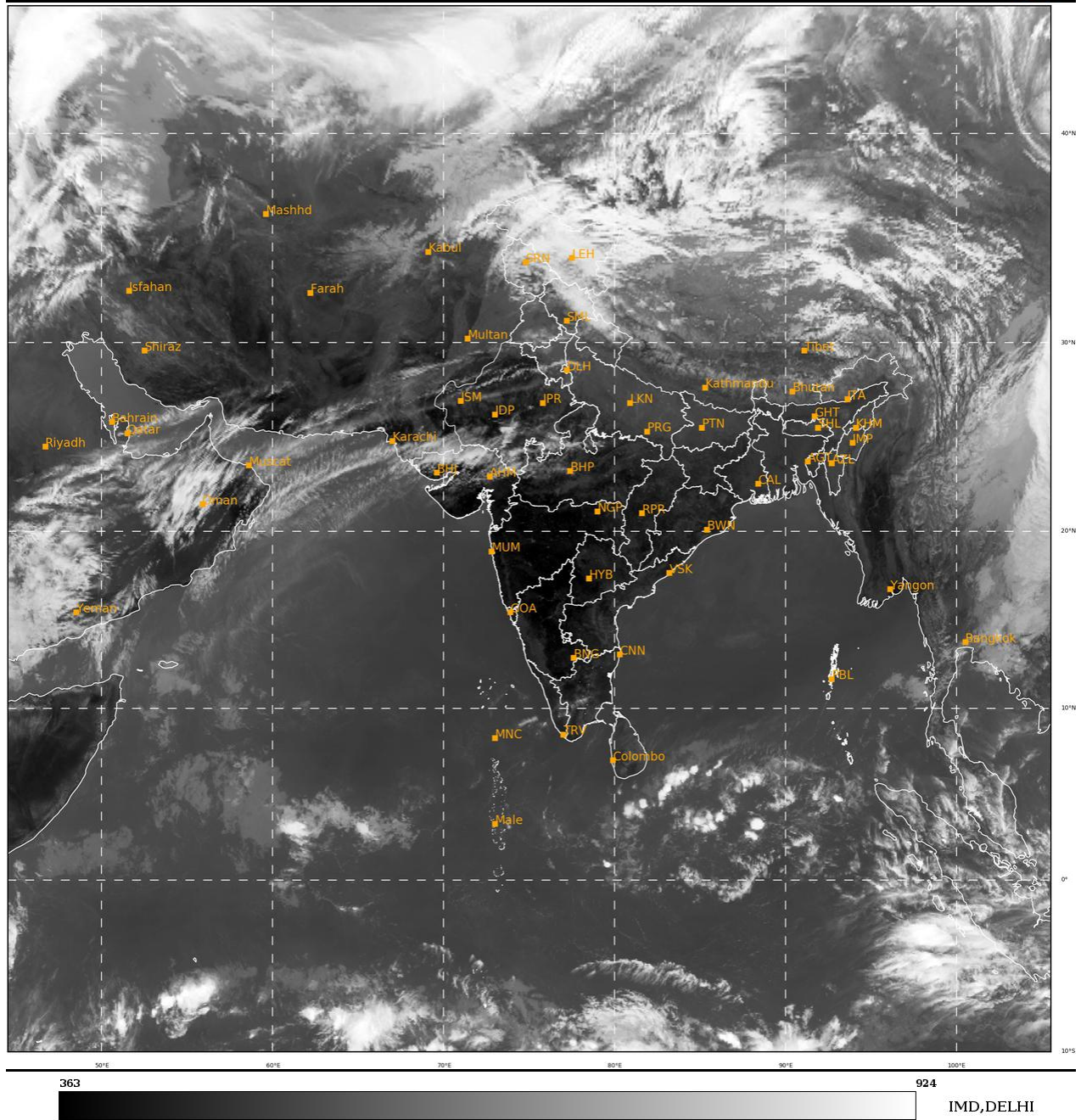
thrips, white flies and mites which results into curling of leaves and stunted growth of plant. For management of sucking pest, spray cow urine 10% and Azadirachtin 10000 PPM @3 ml per liter of water alternatively, seven days after transplanting at 10-15 days interval. Install blue sticky paper trap into field.

- Brinjal: There is possibility of incidence of shoot and fruit borer on Brinjal, if incidence is noticed, collect and destroy all infected shoots and fruits and spray Fenvalerate @10 ml or Deltamethrin 2.8%EC @ 10 ml per 10 liter of water.
- Okra: For management of sucking pest in summer okra, install the yellow sticky trap in field.
- Cucurbitaceous crops: There is possibility of incidence of leaf miner in cucurbitaceous crop, if incidence is noticed, spray 4% NSKE or Azadirachtin 10000 PPM @20 ml or Profenophos 50%EC @ 15 ml or Lambda cyhalothrin 5%EC @6 ml per 10 liters of water.

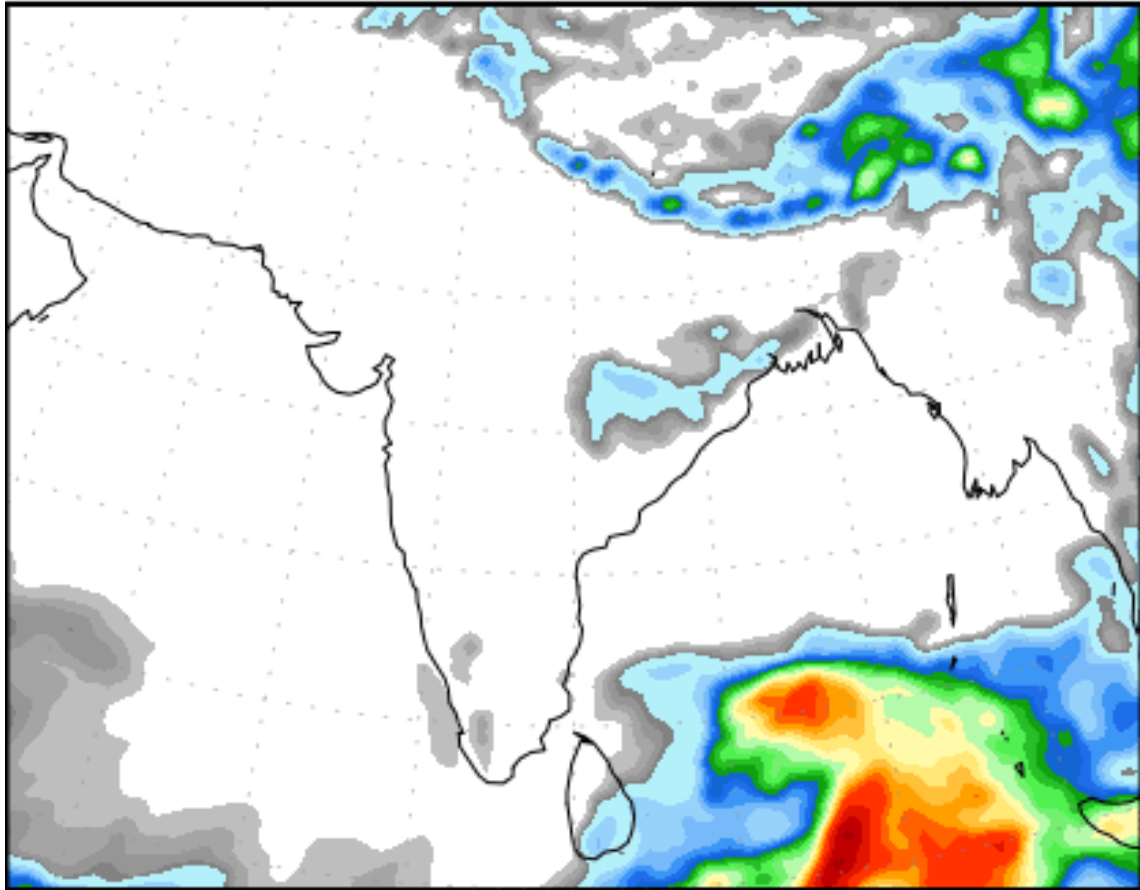


SAT : INSAT-3D IMG  
 IMG\_TIR1 10.8 um  
 L1C Mercator

09-02-2021/(0800 to 0827) GMT  
 09-02-2021/(1330 to 1357) IST



**Figure: 1. Latest available satellite picture as on 09 February 2021 at 1357 Hrs (IST).  
 (Source: IMD).**



**Figure:2. Precipitation forecast for 09 to 17 February 2021 (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.*