All India Coordinated Research Project on Agrometeorology CRIDA, Santoshnagar, Hyderabad – 500 059

Daily Crop Weather Information as on 09 February 2022

Attention: Rajiv Maheshwari, OSD, ICAR

Significant Weather Features (IMD)

• The Western Disturbance as a trough in middle & upper tropospheric westerlies runs along Long. 70°E to the north of Lat. 27°N and an induced cyclonic circulation lies over northeast Rajasthan & neighbourhood in lower tropospheric levels; it is very likely to cause:

1. Scattered light/moderate rainfall/snowfall over Jammu, Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad and fairly widespread to widespread rainfall/snowfall over Himachal Pradesh and Uttarakhand on 09th February. Isolated thunderstorm & lightning also likely over Uttarakhand on 09th February, 2022.

2. Isolated rainfall likely over Punjab, Haryana-Chandigarh-Delhi and East Rajasthan; Scattered to fairly widespread rainfall with thunderstorm, Lightning & hail likely over Uttar Pradesh on 09th February, 2022.

3. Isolated to scattered light/moderate rainfall very likely over West Bengal-Sikkim & Jharkhand, Bihar & Odisha on 09th & 10th February, 2022.

4. Strong winds (speed 25-35 kmph) very likely over Punjab, Haryana and West Uttar Pradesh on 10th & 11th February, 2022.

- Under the influence of fresh feeble Western Disturbance; isolated light rainfall/snowfall over Jammu, Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad and Himachal Pradesh on 13th & 14th February, 2022.
- Dense Fog Conditions very likely in isolated pockets tonight/tomorrow morning hours over Assam-Meghalaya, Punjab, Haryana-Chandigarh-Delhi, north and over Punjab, Haryana-Chandigarh-Delhi & Uttar Pradesh on morning hours of 13th & 14th February, 2022.
- The images showing the latest satellite picture in the figure. 1.

Main Weather Observations (IMD)

• Rainfall/thundershower observed (from 0830 hours IST or yesterday to 0830 hours IST of today): at a few places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Haryana-Chandigarh-Delhi, Sub-Himalayan West Bengal &

Sikkim and Andaman & Nicobar Islands and at isolated places over East Madhya Pradesh, Arunachal Pradesh and Assam & Meghalaya.

- Cold Day conditions observed in many places over Terai region of East Uttar Pradesh.
- Fog observed(at 0830 hrs IST): Dense Fog in isolated pockets over Odisha; Moderate Fog in isolated pockets over Gangetic West Bengal and Shallow Fog in isolated pockets over Sub-Himalayan West Bengal & Sikkim, Delhi, East Uttar Pradesh, Bihar and Saurashtra & Kutch.
- Thunderstorm observed (from 1730 hours IST of yesterday to 0830 hours IST of Today): at isolated pockets over Uttarakhand, Delhi, Haryana and West Rajasthan.
- Minimum Temperature Departures (as on 09-02-2022): Minimum temperatures are appreciably above normal (3.1°C to 5.0°C) at many places over Haryana, Chandigarh & Delhi and West Rajasthan; at a few places over Himachal Pradesh, West Uttar Pradesh and Saurashtra & Kutch and at isolated places over East Rajasthan and East Madhya Pradesh; above normal (1.6°C to 3.0°C) at many places over Uttarakhand, Gujarat Region and Vidarbha; at a few places over East Uttar Pradesh, Marathwada, Telangana, Kerala & Mahe and Tamilnadu, Puducherry & Karaikal; at isolated places over Lakshdweep. They are below normal (-1.6°C to -3.0°C) at a few places over Sub-Himalayan West Bengal & Sikkim, Konkan & Goa, Madhya Maharashtra, North Interior Karnataka and at isolated places over Assam & Meghalaya and near normal over rest parts of the country. Today, the lowest minimum temperature of 7.6°C is reported at Amritsar (Punjab) over the plains of the country.
- Maximum Temperature Departures (as on 08-02-2022): Maximum temperatures were above normal (1.6°C to 3.0°C) at a few places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Himachal Pradesh, Haryana, Chandigarh & Delhi, Madhya Pradesh, Kerala & Mahe and Tamilnadu, Puducherry & Karaikal; at isolated places over East Uttar Pradesh, East Rajasthan and Vidarbha. They were appreciably below normal (-3.1°C to -5.0°C) at many places over Sub-Himalayan West Bengal & Sikkim, Bihar and Nagaland, Manipur, Mizoram & Tripura and at isolated places over Gangetic West Bengal; below normal (-1.6°C to -3.0°C) at many places over Konkan & Goa; at a few places over Assam & Meghalaya, Saurashtra & Kutch and Andaman & Nicobar Islands; isolated places over Gujarat Region, Madhya Maharashtra and Coastal Andhra Pradesh & Yanam and near normal over rest parts of the country. Yesterday, the highest maximum temperature of 35.6°C was reported at Punalur (Kerala & Mahe) over the country.

Weather Warning during the next 5 days (IMD)

- 09 February (Day 1): Thunderstorm accompanied with lightning with Hail at isolated places very likely over Uttar Pradesh and with lightning at isolated places over Uttarakhand, north Madhya Pradesh, Jharkhand and Chhattisgarh. Dense Fog in isolated pockets very likely over Punjab, Haryana-Chandigarh-Delhi, north Rajasthan and Assam-Meghalaya.
- 10 February (Day 2): Thunderstorm accompanied with lightning at isolated places very likely over Jharkhand, Gangetic West Bengal and Tamilnadu-Puducherry-Karaikal. Dense Fog in isolated pockets very likely over Assam-Meghalaya.
- 11 February (Day 3): Thunderstorm accompanied with lightning at isolated places very likely over Tamilnadu-Puducherry-Karaikal and Kerala-Mahe.
- 12 February (Day 4): Thunderstorm accompanied with lightning at isolated places likely over Tamilnadu-Puducherry-Karaikal and Kerala-Mahe. Dense Fog in isolated pockets likely over Punjab, Haryana-Chandigarh-Delhi and Uttar Pradesh.
- 13 February (Day 5): Dense to Very Dense Fog in isolated pockets likely over Uttar Pradesh and Dense Fog in isolated pockets over Punjab and Haryana-Chandigarh-Delhi.
- The weather outlook for seven days i.e., 09 Feb to 17 Feb 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)

Konkan region

Weather condition:

Atmospheric condition was cloudy during morning hours around Dapoli during last week. Therefore 8.4 to 10.3 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 28.0 to 32.5 and 9.6 to 12.9°C respectively. Wind velocity ranged from 2.3 to 3.6 km and wind was blowing from south westerly Direction.

Contingency measure:

- General advisory: Avoid spraying during flowering to fruit setting period in Mango for effective pollination. If spraying is necessary, then spray during afternoon session to avoid harmful effect of insecticide on pollinators
- SMS advisory:For increasing the production and quality improvement of mango

fruits, spray 1 % Potassium nitrate at pea, marble and arecanut size stage of mango fruits

- Horse gram, black gram: There is possibility of incidence of powdery mildew disease on horse gram and black gram, if incidence is noticed, spray Sulphur 80% WDG @ 20 gms per 10 liters of water
- Green gram:For sowing of summer green gram, carryout ploughing operation
- Groundnut:Follow weeding and earthing up at 8-10 days after flower initiation in groundnut. Roll the empty drum over the groundnut crop 15 days after earthing up for better penetration of pegs & pod setting
- Mango: The percentage of flowering intensity is more in most of orchard, but due to prolong period of low temperature (below 15oC), there is increase in number of male flowers which affecting the fruit set. It is advise to shaking of panicles during morning hours at the time of flower opening for more fruit set and retention. 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 undertake spraying during afternoon session.Observed mango Inflorescence and fruits regularly for hoppers, thrips insect and powdery mildew disease, if incidence is noticed, then undertake spraying.For protection against powdery mildew disease, spray Hexaconazole 5% SC @ 5 ml or wettable Sulphur 80% @ 20 gm per 10 liter of water. There is possibility incidence of thrips on mango, if incidence is noticed, spray Spinosad 45%SC @ 2.5 ml per 10iter of water. If incidence is severe, then take second spray of Thiomethoxam 25%WG @ 2 gm per 10 liter of water. There is possibility incidence of hoppers, midge fly on mango inflorescence. For management of pest, spray of Imidacloprid 17.8% SL @ 6 ml or Buprofezin 25%SC@ 20 ml per 10 liter of water. To protect the mustard size fruits of mango from hoppers as per blossom protection schedule for mango crop, take a fourth spray of Thiomethoxam 25%WG @ 1 gm per 10 liter of water and fifth spray (15 days after 4th spray) of Dimethoate 30%EC@ 10 ml or Lambda cyhalothrin 5%EC@ 6 ml per 10 liter of water. To minimize the pre-mature fruit drop of mango, as per availability of water, apply 100 liter / tree at weekly or 150 to 200 liter / tree at 15 days interval from pea to arecanut fruit size also use straw mulch. The preharvest 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 protect the fruits from rain water, fruit fly incidence, sun scorching and improves quality and spot less fruit in mango. Care should be taken that avoid injury to fruit stalk while bagging fruits with paper bag. There is possibility for incidence of fruit fly on mango fruits of egg size. Collect and destroy all fallen fruits and install ?Rakshak fruit fly trap?

developed by University @ 2 traps per acre.To minimize the pre-mature fruit drop and increasing the production and quality improvement of mango fruits, spray 1 % Potassium nitrate at pea marble and arecanut size stage of mango fruits

- Cashewnut:There is possibility of incidence of tea mosquito bug and thrips on inflorescence and nut of cashewnut. If incidence is noticed spray Profenophos 50%EC @ 10 ml at inflorescence stage and Lambda cyhalothrin 5% EC @6 ml per 10 liter of water at nut stage. (The 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.
- Coconut:Due to forecast for increase in temperature, there is possibility of incidence of rugose spiraling white fly on coconut, Nymphs and adults suck the sap from lower surface of leaves and produce honey dew sugary substance which develop growth of sooty mold fungus. If incidence is noticed three spray of Neem oil 0.5% @50 ml per 10 liters of water at 15 days interval followed by three sprays of water by pressure pump at 10 days interval.Provide irrigation to first four years old coconut orchard at 6 to 7 days interval and for above four years old orchard provide irrigation at 5 to 10 days interval. Apply 30 liter of water per day to fully grown coconut tree by drip irrigation. also use straw mulch to reduce evaporation losses.
- Arecanut:Provide irrigation to arecanut orchard at 6-8 days interval.Harvest the fully ripe nut when nuts get orange colour and sundry for 40 to 45 days. nuts are turned over at regular interval to ensure uniform drying
- Black pepper:Carryout harvesting of black paper by hand picking the whole spikes when few berries in the spike start turning yellow or red. The berries are separated and dipped in hot water (80°C) for one minute and sun dried for 3 to 4 days.
- Okra:For cultivation of okra during summer season, carryout primary tillage operation. At the time of ploughing mix well decomposed FYM @ 150 kg/guntha into soil. Sow the seed at a spacing of 45 x 15 cm. Apply 700 gms urea, 3 kg single super phosphate and 400 gms muriate of potash per guntha Provide light irrigation immediate after sowing.
- Brinjal, Chilli:Apply 3rd split dose of nitrogen fertilizer to chilli @ 3 g urea per plant at the time of fruiting and for brinjal @ 4 g urea per plant at 60 DAT.There is possibility of incidence of hoppers, white files and aphids in brinjal chilli, tomato crop. If incidence is noticed, spray dimethoate 30%EC @10 ml per 10 liter of water. Also use yellow sticky cards (1 trap /Guntha) in field to attract the sucking pests.

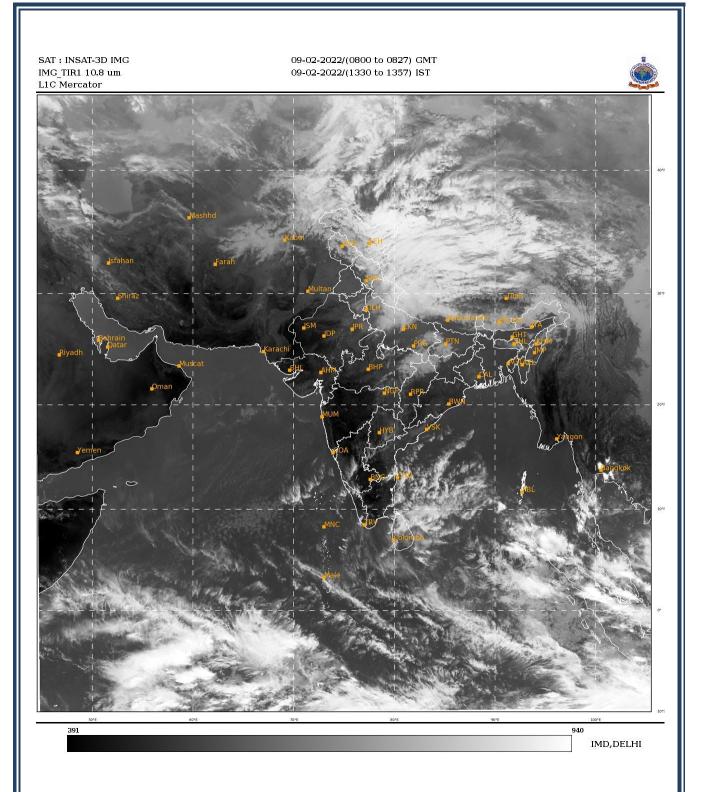


Figure: 1. Latest available satellite picture as on 09 Feb 2022 at 1357 Hrs (IST). (Source: IMD).

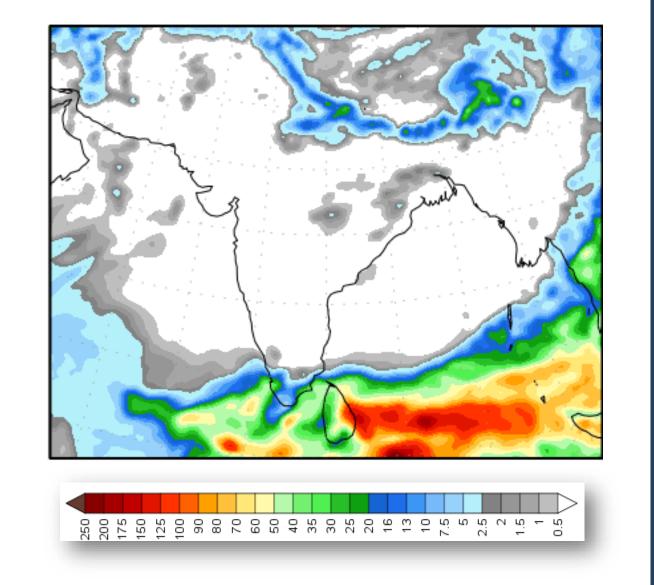


Figure:2. Precipitation forecast for 09 Feb to 17 Feb 2022 (Source: NOAA NCEP).

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