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

Daily Crop Weather Information as on 24 May 2022

Attention: Rajiv Maheshwari, OSD, ICAR

Significant Weather Features (IMD)

- Rainfall/thunderstorm Forecast & Warnings:
- A Western Disturbance as a cyclonic circulation lies over Jammu & neighbourhood extending upto middle tropospheric levels. An induced cyclonic circulation lies over southwest Rajasthan & neighbourhood and a trough runs from this cyclonic circulation to northeast Arabian Sea in lower tropospheric levels.
- A cyclonic circulation lies over north Jharkhand & neighbourhood Sea in lower tropospheric levels with a trough Sea in middle tropospheric levels along Long. 86°E & to the north of Lat. 23°N.
- Under the influence of these systems:
 - Fairly widespread to widespread light/moderate rainfall with isolated thunderstorm/lightning/gusty winds very likely over Jammu & Kashmir, Himachal Pradesh and Uttarakhand; isolated rainfall activity over Punjab, Haryana, Uttar Pradesh, Rajasthan, north Madhya Pradesh today and reduction from tomorrow.
 - Scattered to fairly widespread light/moderate rainfall with isolated thunderstorm/lightning/gusty winds very likely over Bihar, Jharkhand, Odisha and West Bengal & Sikkim during next 3 days and over Northeast India during next 5 days.
 - Isolated Thundersquall (50-60 kmph/hail is very likely over Uttarakhand, Jharkhand, Gangetic West Bengal and Odisha today.
 - Isolated heavy rainfall also likely over Odisha on today, the 24th May and over Assam-Meghalaya on 27th & 28th May, 2022.
 - Fairly widespread to widespread light/moderate rainfall/thunderstorm/lightning with heavy rainfall very likely over Kerala & Mahe during next 5 days.

Advancement of Southwest Monsoon:

Conditions are favourable for further advance of Southwest Monsoon over some parts of Southwest Arabian Sea, some more parts of Southeast Arabian Sea,

Maldives & Comorin area, South & Eastcentral Bay of Bengal and some parts of Northeast Bay of Bengal during next 48 hours.

Heat wave warnings: No heat wave condition is likely to develop over any parts of the country during next 5 days except over West Rajasthan, where isolated heat wave conditions are likely on 27th & 28th May, 2022.

• The images showing the latest satellite picture in the figure. 1.

Main Weather Observations (IMD)

- Rainfall/thundershower observed (from 0830 hours IST of yesterday to 0830 hours IST of today): at most places over Jammu, Kashmir, Ladakh, GilgitBaltistan & Muzaffarabad, Himachal Pradesh, Uttarakhand, Haryana, Chandigarh & Delhi, Lakshadweep and Kerala & Mahe; at many places over Punjab, East Rajasthan, Jharkhand and Andaman & Nicobar Islands; at a few places over West Rajasthan, Madhya Pradesh, Bihar, Sub-Himalayan West Bengal & Sikkim, Coastal Karnataka, Nagaland, Manipur, Mizoram & Tripura and at isolated places over Konkan & Goa, Gangetic West Bengal, Arunachal Pradesh, Assam & Meghalaya, Chhattisgarh, South Interior Karnataka, Tamilnadu, Puducherry & Karaikal and Coastal Andhra Pradesh & Yanam.
- Thunderstorm observed (from 0830 hours IST of yesterday to 0830 hours IST of today): at many places over Jammu, Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad; at a few places over Uttar Pradesh and Delhi and at isolated places over East Madhya Pradesh, Odisha, Bihar, Uttarakhand, West Madhya Pradesh, Gangetic West Bengal, Kerala & Mahe, Lakshadweep, Nagaland, Manipur, Mizoram & Tripura and Andaman & Nicobar Islands.
- Hailstorm reported at isolated places over Jammu & Kashmir, Punjab, Rajasthan and Jharkhand. Thundersquall reported at isolated places over Haryana, Chandigarh & Delhi, East Rajasthan, Chhattisgarh, Jharkhand and Odisha.
- Isolated heavy to very heavy rainfall occurred over Andaman & Nicobar Islands and Kerala & Mahe and heavy rainfall over Uttar Pradesh.
- Maximum Temperature Departures (as on 23-05-2022): Maximum temperatures were appreciably above normal (+3.1°C to +5.0°C) at many places over Arunachal Pradesh; at a few places over Coastal Andhra Pradesh & Yanam; above normal (1.6°C to 3.0°C) at a few places over Assam & Meghalaya, Sub-Himalayan West Bengal & Sikkim and Konkan & Goa and at isolated places over Gangetic West Bengal and Saurashtra & Kutch. They were markedly below normal (-5.1 or less) at most places over Punjab, Uttarakhand, Haryana, Chandigarh & Delhi and West Uttar Pradesh and at isolated places over West Rajasthan; appreciably below normal (-3.1°C to -5.0°C) at most places over East Rajasthan and North Interior

Karnataka; at many places over East Uttar Pradesh; at a few places over Jammu & Kashmir, West Madhya Pradesh and Andaman & Nicobar Islands; below normal (-1.6°C to -3.0°C) at most places over Uttarakhand, Bihar and Saurashtra & Kutch; at many places over Himachal Pradesh, East Madhya Pradesh, Jharkhand, Lakshadweep, Madhya Maharashtra, Marathwada and Rayalaseema; at few places over Gujarat Region, Gangetic West Bengal, Telangana, Tamil Nadu, Puducherry & Karaikal and Kerala & Mahe and at isolated places over Coastal Andhra Pradesh & Yanam and near normal over rest parts of the country. Yesterday, the highest maximum temperature of 43.3°C was reported at Tuni (Coastal Andhra Pradesh) and Jaisalmer (West Rajasthan).

• Minimum Temperature Departures (as on 24-05-2022): Minimum temperatures are above normal (1.6°C to 3.0°C) at many places over SaurashtraKutch; at a few places over Telangana; at isolated places over Madhya Maharashtra, Coastal Andhra Pradesh & Yanam, West Bengal & Sikkim, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura and Andaman & Nicobar Islands. They are markedly below normal (-5.1 or less) at many places over Uttar Pradesh, Jharkhand and Odisha; at a few places over Punjab and West Rajasthan; at isolated places over Jammu, Kashmir, Ladakh, Gilgit_Baltistan & Muzaffarabad; below normal (-1.6°C to -3.0°C) ata few places over Uttarakhand and Chhattisgarh and at isolated places over and near normal over rest parts of the country. Today, the lowest minimum temperature of 17.0°C reported at Delhi-Ridge (Delhi) over the plains of the country.

Weather Warning during the next 5 days (IMD)

24 May (Day 1): Heavy rainfall at isolated places very likely over Odisha and Kerala & Mahe. Thundersquall accompanied with lightning/gusty winds (speed 50-60 kmph) & hail at isolated places very likely over Uttarakhand, Jharkhand; with lightning/gusty winds (speed 50-60 kmph) at isolated places over Odisha, Gangetic West Bengal; with lightning/gusty winds (speed 40-50 kmph) at isolated places over East Rajasthan, East Madhya Pradesh, Chhattisgarh, Coastal Andhra Pradesh; gusty winds (speed 30-40 kmph) at isolated places over Uttar Pradesh, West Madhya Pradesh, Vidarbha, Bihar, Sub-Himalayan West Bengal & Sikkim, Andaman & Nicobar Islands and with lightning at isolated places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Himachal Pradesh, Punjab, Haryana, Chandigarh & Delhi, Assam & Meghalaya, Tripura, South Interior Karnataka, Tamilnadu, Puducherry & Karaikal, Lakshadweep area and Kerala & Mahe. Duststorm/thunderstorm/gusty winds (speed 30-40 kmph) at isolated places very likely over West Rajasthan. Squally weather (wind speed 40-50 kmph gusting to 60 kmph) very likely over north Andaman Sea and adjoining east

- central Bay of Bengal, Gulf of Mannar and southwest Bay of Bengal. Squally weather (wind speed 40-50 kmph gusting to 60 kmph) over southeast Arabian Sea along & off south Kerala coast & Lakshadweep area. Strong winds (40-50 kmph gusting to 60 kmph) likely over northeast Arabian Sea along and off north Gujarat coast, south west & adjoining westcentral Arabian Sea. Fishermen are advised not to venture into these areas.
- 25 May (Day 2): Heavy rainfall at isolated places very likely over Kerala & Mahe. Thunderstorm accompanied with lightning/gusty winds (speed 40-50 kmph) at isolated places very likely over Gangetic West Bengal, Coastal Andhra Pradesh; with lightning/gusty winds (speed 30-40 kmph) at isolated places over Uttar Pradesh, East Rajasthan, East Madhya Pradesh, Chhattisgarh, Jharkhand and with lightning at isolated places over West Madhya Pradesh, Vidarbha, Bihar, Sub-Himalayan West Bengal & Sikkim, Odisha, Tamilnadu, Puducherry & Karaikal, Lakshadweep area and Kerala & Mahe. Squally weather (wind speed 40-50 kmph gusting to 60 kmph) very likely over north Andaman Sea and adjoining eastcentral Bay of Bengal, Gulf of Mannar and southwest Bay of Bengal. Squally weather (wind speed 40-50 kmph gusting to 60 kmph) over southeast Arabian Sea along & off south Kerala coast & Lakshadweep area. Strong winds (40-50 kmph gusting to 60 kmph) likely over southwest Arabian Sea. Fishermen are advised not to venture into these areas.
- 26 May (Day 3): Heavy rainfall at isolated places very likely over Kerala & Mahe and Tamilnadu, Puducherry & Karaikal. Thunderstorm accompanied with lightning/gusty winds (speed 30-40 kmph) at isolated places very likely over Gangetic West Bengal and with lightning at isolated places likely over Madhya Pradesh, Vidarbha, Chhattisgarh, Jharkhand, Sub-Himalayan West Bengal & Sikkim, Tamilnadu, Puducherry & Karaikal, Lakshadweep area and Kerala & Mahe.
- 27 May (Day 4): Heavy rainfall at isolated places likely over Kerala & Mahe and Meghalaya. Thunderstorm accompanied with lightning at isolated places likely over East Madhya Pradesh, Vidarbha, Chhattisgarh, Lakshadweep area and Kerala & Mahe. Heat wave conditions in isolated pockets likely over West Rajasthan.
- 28 May (Day 5): Heavy rainfall at isolated places likely over Kerala & Mahe and Assam & Meghalaya. Thunderstorm accompanied with lightning at isolated places very likely over Chhattisgarh, Gangetic West Bengal and Lakshadweep area. Heat wave conditions in isolated pockets likely over West Rajasthan.
- The weather outlook for seven days i.e., 24 May to 01 Jun 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)

Gujarat

Weather condition:

The actual maximum temperature was $0.7~^{\circ}$ C lower and actural minimum temperature were $1.4~^{\circ}$ C higher as compared to their normals. Total BSS was 69.8 hrs. with an average of 10.0~hrs. The daily average evaporation and wind speed was 8.3~mm and 6.4~km/hr respectively. The daily average RH during morning and afternoon was $81.6~^{\circ}$ % and $39.9~^{\circ}$ % respectively.

Contingency measure:

- Summer pearl millet: Irrigate the crop according to soil type and climatic conditions. To control downy mildew disease, spray Metalaxyl MZ 15 g in 10 liter of water.
- Summer greengram: For effective control of whitefly infestation and other sucking pest infestation observed spray neem oil @ 50ml/15 liter or Imidachlopride 17.8 SL @ 5ml/15 liter or Acetamiprid 20% SP @ 3 g/15 liter. To control mosaic disease in mungbean crop, spray neem based insecticides 0.15 EC 40 ml or insecticides like Dimethoate 30 EC or Acetamiprid 20 SP 2 g in 10 liter of water. Use 10 pheromone trap per acre for management of sucking pest.
- Chilli: For control of thrips, spray Profenofos 20 ml or neem seed oil 50 ml in 10 liter water. In case of severe attack, spray Spinosad or Spinetoram 3 ml per 10 liter of water.
- Banana: Apply irrigation at an interval of 4 to 5 days as per requirement of crop in summer season. Spraying with zinc sulphate 0.5% or ferrous sulphate 0.2% in banana crop at flowering stage for improving quality and yield.
- MANGO: Reduction of high temperature effect of mango fruits can be managed by irrigating the orchard. Install nauroji fruit fly trap @ 10 trap per hector in mango orchard nearby to sapota orchard.
- Cattle: Give daily 30 to 40 g mineral mixture to animals in summer. Animal shelter should be well ventilated in summer. If the roof is made of iron or sheet, paint the top surface of roof with white color or make layer of dry fodder on the roof, which can reduce the direct heating to animals. Bathing animals two to three times in a day especially at noon hours during summer for protect them from heat and maintain milk production. Give cool and clean drinking water thrice in a day.



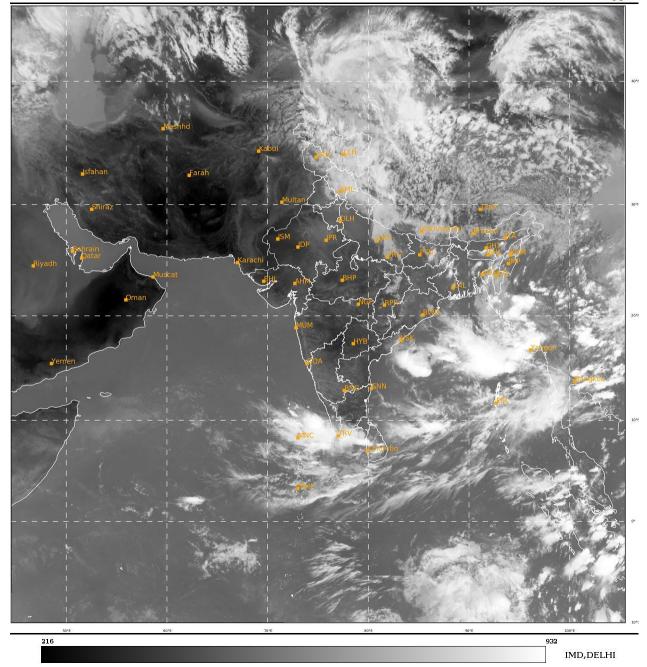


Figure: 1. Latest available satellite picture as on 24 May 2022 at 1356 Hrs (IST). (Source: IMD).

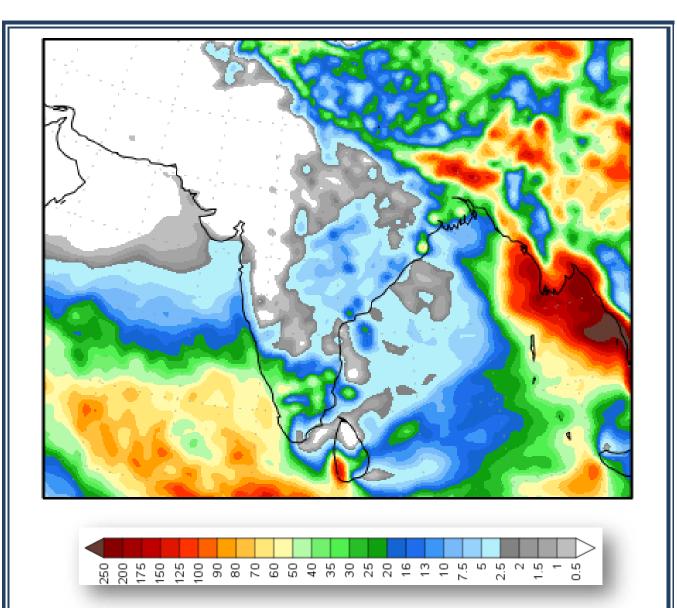


Figure: 2. Precipitation forecast for 24 May to 01 Jun 2022 (Source: NOAA NCEP).

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