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

## **Daily Crop Weather Information as on 12 May 2021**

Attention: Rajiv Maheshwari, OSD, ICAR

#### Significant Weather Features (IMD)

- A Low Pressure Area is very likely to form over Southeast Arabian Sea around 14th May morning. It is very likely to concentrate into a Depression over Lakshadweep area and adjoining Southeast & Eastcentral Arabian Sea by 15th May. It is very likely to move north-northwestwards and intensify further into a Cyclonic Storm over Eastcentral Arabian Sea around 16th May and continue to move north-northwestwards for some more time with further intensification. Under its influence, heavy to very heavy rainfall is likely at a few places during 14-16 May with isolated extremely heavy falls over Lakshadweep on 14 and 15 May; heavy to very heavy rainfall is likely at a few places over Kerala and over isolated places over Tamilnadu and coastal and south Interior Karnataka during 14-16 May. Fishermen are advised not to venture out to the southeast Arabian Sea and adjoining Maldives, Comorin and Lakshadweep area, Kerala coast from morning of 13 May and east central Arabian sea and along and off Karnataka-Goa and Maharashtra and Goa coasts from 14th Night. Those, who are in Sea are advised to return to the coast by the night of 12th May, 2021.
- A Western Disturbance as a trough runs along Longitude 70°E and north of Latitude 28°N in middle tropospheric levels. A cyclonic circulation lies over Punjab & neighbourhood and an east-west trough runs from this cyclonic circulation to Sub Himalayan West Bengal & Sikkim at lower levels. In addition, there is likely confluence of winds from Arabian Sea and easterly winds at lower levels over northwest India during next 2-3 days. Under the influence these widespread systems, fairly widespread to rainfall with thunderstorm/lightening/gusty winds & hailstorm very likely over Western Himalayan Region and scattered to fairly widespread rainfall with isolated thunderstorm/lightening/gusty winds over plains of northwest India during next 2 days and decrease significantly thereafter. Isolated heavy rainfall is also likely over Uttarakhand on 12 & 13 May; and over Punjab and Haryana & Chandigarh on 13 May, 2021.

- Under the influence of above mentioned east-west trough at lower levels and north-south trough over northeast India at middle tropospheric levels, fairly widespread to widespread rainfall/thunderstorm activity is very likely to continue over northeastern states and West Bengal & Sikkim and isolated to scattered rain/thundershower over rest parts of east India during next 2-3 days and decrease in intensity & distribution thereafter. Isolated heavy rainfall is also likely over Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura and Sub Himalayan West Bengal on 12 & 13 May.
- No heat wave is likely over any part of the country during next 5 days.
- The images showing the latest satellite picture in the figure. 1.

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

- Rain/Thundershowers observed (from 0830 hours IST of yesterday to 0830 hours IST of today): at most places over West Bengal & Sikkim, Odisha, Arunachal Pradesh, Nagaland, Manipur, Mizoram & Tripura, Coastal Andhra Pradesh & Yanam and Lakshadweep; at many places over Jammu, Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, Uttarakhand, Vidarbha, Chhattisgarh, Bihar, Assam & Meghalaya, Rayalaseema, South Interior Karnataka and Kerala & Mahe; at a few places over Telangana and Coastal Karnataka and at isolated places over Himachal Pradesh, Punjab, Haryana, Chandigarh & Delhi, Uttar Pradesh, Rajasthan, Jharkhand, Andaman & Nicobar Islands, North Interior Karnataka and Tamilnadu, Puducherry & Karaikal.
- Heavy Rainfall observed (from 0830 hours IST of yesterday to 0830 hours IST of today): Heavy to Very Heavy Rainfall at isolated places over West Bengal & Sikkim and Kerala & Mahe and Heavy Rainfall at isolated places over Chhattisgarh, Bihar, Rayalaseema, Tamilnadu, Puducherry & Karaikal and Lakshadweep.
- Thunderstorm/Hailstorm observed (from 1730 hours IST of yesterday to 0830 hours IST of today): Thunderstorm at most places over Kerala & Mahe; at many places over Gangetic West Bengal and Coastal Andhra Pradesh & Yanam; at a few places over Assam & Meghalaya, Lakshadweep and South Interior Karnataka; at isolated places over West Uttar Pradesh, Rajasthan, Haryana, Chandigarh & Delhi, Uttarakhand, Bihar, Chhattisgarh, North Interior Karnataka and Telangana. Hailstorm at isolated places over Uttarakhand, West Rajasthan and Telangana.
- Maximum Temperature Departures as on 11-05-2021: Maximum temperatures were above normal (1.6°C to 3.0°C) at many places over Andaman & Nicobar

Islands, Konkan & Goa and Coastal Karnataka; at a few places over Saurashtra & Kutch and at isolated places over Tamilnadu, Puducherry & Karaikal. They were markedly below normal (-5.1°C or more) at many places over Jammu, Kashmir, Ladakh, Gilgit-Baltistan and Muzaffarabad and Chhattisgarh; at a few places over Odisha and Himachal Pradesh and at isolated places over West Bengal & Sikkim, Bihar, Punjab and East Madhya Pradesh; appreciably below normal (-3.1°C to -5.0°C) at many places over Jharkhand; below normal (-1.6°C to -3.0°C) at many places over East Rajasthan and North Interior Karnataka; at a few places over West Madhya Pradesh, Telangana and Coastal Andhra Pradesh & Yanam; at isolated places over Andaman & Nicobar Islands, West Madhya Pradesh, Rayalaseema and Madhya Maharashtra and at isolated places over Saurashtra & Kutch, Telangana and Coastal Andhra Pradesh & Yanam and near normal over rest parts of the country. Yesterday, the highest Maximum Temperature of 42.8°C was reported at Chandrapur (Vidarbha).

• Minimum Temperature Departures as on 12-05-2021: Minimum temperatures are above normal (1.6°C to 3.0°C) at a few places over Tamil Nadu, Puducherry & Karaikal; at isolated places Jammu, Kashmir, Ladakh, Gilgit-Baltistan and Muzaffarabad, Himachal Pradesh, West Rajasthan, Gujarat Region, East Uttar Pradesh and Andaman & Nicobar Islands. They are markedly below normal (-5.0°C or less) at isolated places over Coastal Andhra Pradesh & Yanam; appreciably below normal (-3.1°C to -5.0°C) at many places over Odisha and Telangana; at a few places over Gangetic West Bengal, Chhattisgarh and Rayalaseema; at isolated places over Bihar; below normal (-1.6°C to -3.0°C) at many places over East Madhya Pradesh; at a few places over West Madhya Pradesh and Lakshadweep; at isolated places over Haryana, Chandigarh & Delhi, East Rajasthan, Vidarbha and Sub-Himalayan West Bengal & Sikkim and near normal over rest parts of the country. Today, the lowest minimum temperature of 18.0°C is reported at Bahraich (East Uttar Pradesh) over the plains of the country.

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

• 12 May (Day 1): Thunderstorm with lightning, hail & squall (speed reaching 50-60 kmph) very likely at isolated places over Punjab and Haryana, Chandigarh & Delhi; with lightning, hail & gusty winds (speed reaching 40-50 kmph) very likely at isolated places over Odisha; with lightning, hail & gusty winds (speed reaching 30-40 kmph) at isolated places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, Himachal Pradesh, Uttarakhand and Telangana; with lightning & gusty wind (speed reaching 30-40 kmph) at isolated places over Uttar Pradesh, Bihar, Jharkhand, West Bengal & Sikkim, Assam & Meghalaya, Rayalaseema,

Kerala & Mahe and Lakshadweep; with lightning at isolated places over Madhya Pradesh, Vidarbha, Chhattisgarh, Arunachal Pradesh, Nagaland, Manipur, Mizoram & Tripura, Coastal Andhra Pradesh & Yanam, Karnataka and Tamil Nadu, Puducherry & Karaikal. Thunderstorm/Duststorm/Hailstorm (speed reaching 40-50 kmph) very likely at isolated places over north Rajasthan. Heavy to Very Heavy Rainfall very likely at isolated places over Kerala & Mahe and Heavy Rainfall at isolated places over Uttarakhand, Punjab, Haryana, Chandigarh & Delhi, Bihar, Sub-Himalayan West Bengal & Sikkim, Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Coastal & South Interior Karnataka, Tamil Nadu, Puducherry & Karaikal and Lakshadweep. Squally Weather (wind speed reaching 40-50 kmph) very likely over Southwest and adjoining Southeast Arabian Sea and adjoining equatorial India Ocean, Maldives, Comorin and Lakshadweep area. Fishermen are advised not to venture into these areas.

13 May (Day 2): Thunderstorm with lightning, hail & squall (speed reaching 50-60 kmph) very likely at isolated places over Punjab and Haryana, Chandigarh & Delhi; with lightning, hail & gusty winds (speed reaching 30-40 kmph) at isolated places over Himachal Pradesh, Uttarakhand and Telangana; with lightning & gusty wind (speed reaching 40-50 kmph) at isolated places over Gangetic West Bengal; with lightning & gusty wind (speed reaching 30-40 kmph) at isolated places over Uttar Pradesh, Bihar, Jharkhand, Sub-Himalayan West Bengal & Sikkim, Odisha, Kerala & Mahe and Lakshadweep; with lightning at isolated places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, Chhattisgarh, Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Coastal Andhra Pradesh & Yanam, Rayalaseema, Karnataka and Tamil Nadu, Puducherry & Karaikal. Thunderstorm/Duststorm/Hailstorm (speed reaching 40-50 kmph) very likely at isolated places over north Rajasthan. Heavy rainfall very likely at isolated places over Uttarakhand, West Bengal & Sikkim, Odisha, Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Coastal & South Interior Karnataka, Tamil Nadu, Puducherry & Karaikal, Kerala & Mahe and Lakshadweep. Squally wind speed reaching 40-50kmph gusting to 60kmph very likely over Southeast Arabian Sea and adjoining equatorial India Ocean, Maldives, Comorin and Lakshadweep area and along and off Kerala coast. Squally Weather (wind speed reaching 40-50 kmph) very likely over Southwest and adjoining equatorial India Ocean. Fishermen are advised not to venture into these areas.

- 14 May (Day 3): Thunderstorm with lightning & gusty wind (speed reaching 30-40 kmph) very likely at isolated places over Punjab, Haryana, Chandigarh & Delhi, Rajasthan, Gangetic West Bengal, Madhya Maharashtra, Marathwada, Telangana, Tamil Nadu, Puducherry & karaikal, Kerala & Mahe and Lakshadweep; with lightning at isolated places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, Himachal Pradesh, Uttarakhand, Uttar Pradesh, Chhattisgarh, Sub-Himalayan West Bengal & Sikkim, Odisha, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Gujarat state, Konkan & Goa, Coastal Andhra Pradesh & Yanam, Rayalaseema and Karnataka. Heavy to very heavy rainfall with extremely heavy falls likely at isolated places Lakshadweep; heavy to very heavy rainfall at a few places over Kerala & Mahe and at isolated places over Coastal & South Interior Karnataka and Tamil Nadu, Puducherry & Karaikal and Heavy Rainfall at isolated places over Sub-Himalayan West Bengal & Sikkim and Assam & Meghalaya. Squally wind speed reaching 45kmph gusting to 55kmph over Southeast Arabian Sea and adjoining equatorial India Ocean, Maldives, Comorin and Lakshadweep area and along and off Kerala coast. Squally Weather (wind speed reaching 40-50 kmph) also very likely over Southwest and adjoining equatorial India Ocean. Sea conditions over southeast Arabian Sea and adjoining Lakshadweep-Maldives area & equatorial Indian Ocean will be rough to very rough. Sea conditions will be rough to very rough over Comorin area and along & off Kerala coast. Fishermen are advised not to venture into these areas.
- 15 May (Day 4): Thunderstorm with lightning & gusty wind (speed reaching 30-40 kmph) likely at isolated places over Madhya Maharashtra, Marathwada, Rayalaseema, Karnataka, Tamil Nadu, Puducherry & Karaikal, Kerala & Mahe and Lakshadweep; with lightning at isolated places over Chhattisgarh, Gangetic West Bengal, Gujarat state, Konkan & Goa, Coastal Andhra Pradesh & Yanam and Telangana. Heavy to very heavy rainfall with extremely heavy falls likely at isolated places Lakshadweep; heavy to very heavy rainfall at a few places over Coastal & South Interior Karnataka and Kerala & Mahe and at isolated places over Tamil Nadu, Puducherry & Karaikal and Heavy Rainfall at isolated places over Konkan & Goa, Rayalaseema and North Interior Karnataka. Squally wind speed reaching 50-60 kmph gusting to 70kmph likely over southeast Arabian Sea and adjoining east central Arabian Sea, and along and off Kerala-Karnataka coast, Lakshadweep, Maldives areas and adjoining equatorial Indian Ocean till afternoon of 15th May. It is likely to increase with Gale wind speed 60-70 kmph gusting to 80kmph over East central Arabian Sea and adjoining southeast Arabian

Sea and Lakshadweep area from night of 15th May. Squally wind speed reaching 40-50 kmph gusting to 60kmph also very likely along and off Maharashtra coast. Squally Weather (wind speed reaching 40-50 kmph) very likely over Southwest and adjoining equatorial India Ocean. Sea conditions over southeast Arabian Sea and adjoining LakshadweepMaldives area & equatorial Indian Ocean will be rough to very rough. Sea conditions will be rough to very rough over eastcentral Arabian Sea along & off Karnataka coast. Tidal wave of about 1metre height above the astronomical tide is very likely to inundate low lying areas of Lakshadweep Islands. Fishermen are advised not to venture into these areas.

- 16 May (Day 5): Thunderstorm with lightning & gusty winds (speed reaching 30-40 kmph) likely at isolated places over Telangana, Karnataka, Tamil Nadu, Puducherry & Karaikal, Kerala & Mahe and Lakshadweep; with lightning at isolated places over Vidarbha, Chhattisgarh, Gujarat state, Konkan & Goa, Madhya Maharashtra, Marathwada and Coastal Andhra Pradesh & Yanam, Rayalaseema. Heavy to very heavy rainfall likely at a few places over Coastal & South Interior Karnataka and at isolated places North Interior Karnataka, Tamil Nadu, Puducherry & Karaikal and Kerala & Mahe and Lakshadweep and Heavy Rainfall at isolated places over Konkan & Goa and Telangana. Gale wind speed reaching 70-80 kmph gusting to 90 kmph likely over eastcentral Arabian Sea and Gale wind speed 60-70 kmph gusting to 80kmph likely over southeast Arabian Sea and along and off Kerala-Karnataka coast, Lakshadweep, Maldives areas and adjoining equatorial Indian Ocean. Squally wind speed reaching 40-50 kmph gusting to 60kmph also very likely along and off Maharashtra coast . Squally Weather (wind speed reaching 40-50 kmph) very likely over Southwest and and adjoining equatorial India Ocean. Sea conditions will be very rough to Phenomenal over eastcentral Arabian Sea and rough to very rough along & off Goa, Karnataka, Kerala coast, southeast Arabian Sea and adjoining Lakshadweep-Maldives area & equatorial Indian Ocean. Tidal wave of about 1metre height above the astronomical tide is very likely to inundate low lying areas of Lakshadweep Islands. Fishermen are advised not to venture into these areas.
- The weather outlook for seven days i.e., 12 May to 20 May 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)**

Marathwada

Weather condition:

At Parbhani centre: 30 April to 06 May (SMW 18) during this period no rainfall was recorded. The Maximum temperature was range from 35.6 to 40.9 0C and minimum temperature range from 20.4 to 25.8 0C. Relative humidity (RH I) ranged between 41-80% and relative humidity (RH II) recorded was 15-31%. The wind speed varied between 2.8 to 6.2 km/hr.

#### **Contingency measure:**

- Sugarcane: For management of stem borer in Sugarcane crop take a spray of Chlorpyriphos 20% @ 25 ml or chlorantraniliprole 18.5 % @ 4 ml per 10 liter of water during clear weather condition.
- Turmeric: Now a days harvesting, boiling, drying, polishing operations carried out in timely sown turmeric crop. Due to Forecast of Thunderstorm accompanied with Lightning, gusty wind and Rain at isolated places, Turmeric crop should not be stored in open place.
- Summer groundnut: If infestation of sucking pests (Thrips, Aphids, Jassids) is observed in groundnut crop, take a spray of imidacloprid 17.8% @ 2 ml or Thiamethoxam 12.6 % + Lambda Cyhalothrin 9.5 % @ 3 ml per 10 liter of water. Spraying should be taken during Clear weather condition.
- Citrus: Due to Forecast of Thunderstorm accompanied with Lightning, gusty wind and Rain at isolated places, give support with the help of stick to newly planted Citrus orchard.
- Pomegranate: Due to Forecast of Thunderstorm accompanied with Lightning, gusty wind and Rain at isolated places, give support with the help of stick to newly planted Pomegranate orchard.
- Banana: Due to Forecast of Thunderstorm accompanied with Lightning and Rain with Possibility of Hail at isolated places, give support with the help of stick to newly planted Banana orchard.
- Mango: Due to Forecast of Thunderstorm accompanied with Lightning and Rain with Possibility of Hail at isolated places, Harvesting of mature Mango fruits should be done as early as possible. For management of stem borer in mango remove the dried old branches from the tree. If infection is observed on tree collect the grubs from holes with the help of metal wired hook and apply petrol cotton swab or Chloropyriphos solution (2 ml per liter of water) swab and close the holes with mud or cow dung.
- Grape: April pruning in grape is carried out for initiation of grape bunch. April pruning should be carried out in grape orchard.
- Custard apple: Due to Forecast of Thunderstorm accompanied with Lightning and Rain with Possibility of Hail at isolated places, give support with the help of

stick to newly planted Custard apple orchard. For management of stem borer in Custard apple remove the dried old branches from the tree. If infection is observed on tree collect the grubs from holes with the help of metal wired hook and apply petrol cotton swab or Chloropyriphos solution (2 ml per liter of water) swab and close the holes with mud or cow dung.

- Sericulture: For Mulberry plantation select the land where chilli, turmeric, tobacoo and vegetable crops were not taken. Because in those fields more amount of chemical fertilizers, insecticides/ fungicides and herbicides were utilized for spraying. Maintain the temperature and huminity in between 22 to 28 0c above 35 0c the silkworms will not eat the mulberry leaves.
- Vegetable: Due to Forecast of Thunderstorm accompanied with Lightning, gusty wind and Rain at isolated places, harvesting of mature vegetable crops, Watermelon, Muskmelon etc. should be done. For management of fruit fly in Cucurbitaceae family make use of Methyl eugenol pheromone trap. take a spray of Cyantraniliprole 10.26% @ 18 ml per 10 liter of water. Spraying should be taken during Clear weather condition.
- Floriculture: Due to Forecast of Thunderstorm accompanied with Lightning, gusty wind and Rain at isolated places, harvesting of mature flowers should be done and send it to market by grading. Fodder Due to Forecast of Thunderstorm accompanied with Lightning, gusty wind and Rain at isolated places, Precaution should be taken so that the harvested dry stover of sorghum not damaged by unseasonal rains, if it happens the quality as well as storage capacity of dry stover decrease and animals not prefer such type of fodder.

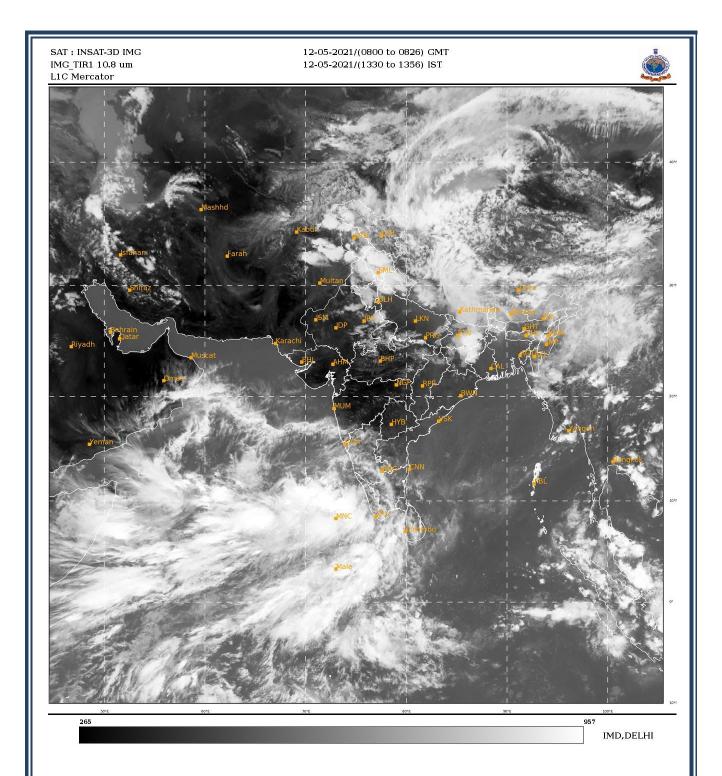


Figure: 1. Latest available satellite picture as on 12 May 2021 at 1356 Hrs (IST). (Source: IMD).

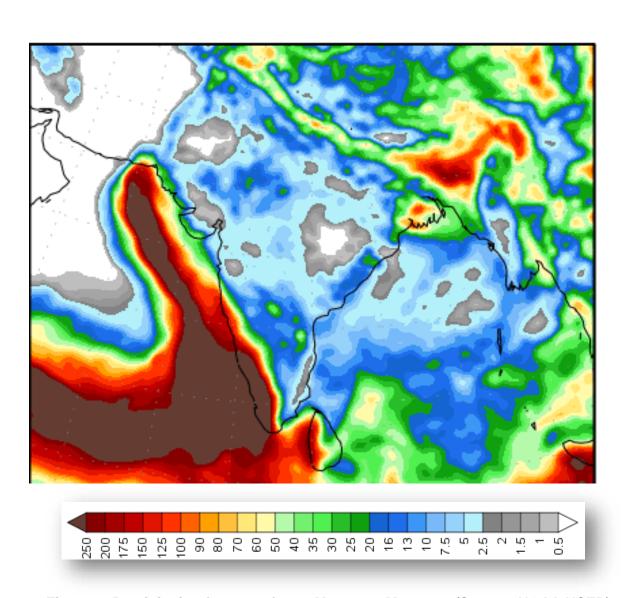


Figure: 2. Precipitation forecast for 12 May to 20 May 2021 (Source: NOAA NCEP).

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