

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

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

### **Daily Crop Weather Information as on 19 May 2021**

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

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

- A Depression (remnant of the Extremely Severe Cyclonic Storm “Tauktae”) lay centred at 0830 hours IST of today, the 19th May, 2021 near latitude 24.9°N and longitude 73.7°E over southeast Rajasthan, about 30 km southsouthwest of Udaipur (Rajasthan). It is very likely to move northeastwards and weaken gradually into a Well Marked Low pressure area during next 12 hours. The remnant of the system is very likely to move further northeastwards across Rajasthan to Uttar Pradesh during the next two days.
- A Western Disturbance lies as a cyclonic circulation over Jammu & Kashmir between 3.1 & 3.6 km above mean sea level with trough aloft at 5.8 km above mean sea level roughly along longitude 70°E to the north of latitude 27°N. ♦ The depression (remnant of Cyclonic Storm “Tauktae”) would interact with the above Western Disturbance. In addition, high moisture feeding from Arabian Sea is also likely over northwest India. As a result, fairly widespread to widespread rainfall activity likely over northwest India (except Jammu & Kashmir) with heavy to very heavy rainfall and extremely heavy falls at isolated places over Uttarakhand; heavy to very heavy rainfall at isolated places over northwest Uttar Pradesh; and heavy rainfall at isolated places over Himachal Pradesh Haryana, Chandigarh & Delhi, rest parts of Uttar Pradesh, northeast Rajasthan and north Madhya Pradesh on 19 May, 2021. Light to moderate rainfall/ thundershower is very likely over Delhi NCR on 19May, 2021.
- Rainfall activity is very likely to decrease from 20 May with fairly widespread to widespread rainfall over Uttar Pradesh & Uttarakhand; and isolated to scattered rainfall over rest parts of northwest India. Heavy to very heavy rainfall at isolated places also likely over Uttarakhand and heavy rainfall at isolated places over West Uttar Pradesh on 20th May. Rainfall activity is very likely to decrease significantly over the region from 21st May, 2021.
- Due to southerly/southwesterly winds from Bay of Bengal over northeast India and cyclonic circulation over Assam at lower levels, fairly widespread to

widespread rainfall with isolated heavy rainfall very likely over Sub-Himalayan West Bengal & Sikkim and northeastern states during 19 to 21 May, 2021.

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

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

- Rain/Thundershowers observed (from 0830 of yesterday to 0830 hours IST of today): at most places over Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Uttarakhand, Uttar Pradesh, East Rajasthan, Madhya Pradesh, Konkan & Goa, Gujarat State and Coastal Karnataka, Kerala & Mahe and Lakshadweep; at many places over Andaman & Nicobar Island, Gangetic West Bengal, Jharkhand, Haryana, Chandigarh & Delhi, Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, West Rajasthan, Vidarbha, interior Karnataka; at a few places over Himachal Pradesh, Sub-Himalayan West Bengal & Sikkim, Konkan & Goa and at isolated places over Bihar, Marathwada, Coastal Andhra Pradesh & Yanam, Telangana, Rayalaseema and Tamil Nadu, Puducherry & Karaikal.
- Very heavy to extremely heavy rainfall observed at isolated places over Gujarat Region; heavy to very heavy rainfall observed at isolated places over Konkan & Goa and Saurashtra & Kutch and heavy rainfall observed at isolated places over Assam & Meghalaya and East Rajasthan.
- Heavy rainfall observed (from 0830 of yesterday to 0830 hours IST of today): Heavy to very heavy rainfall at isolated places with extremely heavy falls at isolated places over Konkan & Goa and Saurashtra & Kutch; heavy to very heavy rainfall at isolated places over Gujarat Region; heavy rainfall at isolated places over East Madhya Pradesh and Assam & Meghalaya.
- Thunderstorm observed (from 0830 hours IST of yesterday to 0830 hours IST of today): at a few places over Tripura & Kerala & Mahe; at isolated places over Jammu, Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, Assam & Meghalaya, Gangetic West Bengal, East Uttar Pradesh, East Rajasthan, Madhya Pradesh, Bihar, Jharkhand, Chhattisgarh, Gujarat State, Konkan & Goa, Vidarbha, Madhya Maharashtra, Tamilnadu & Puduchery and Coastal & North Interior Karnataka.
- Maximum Temperature Departures as on 18-05-2021: Maximum temperatures were appreciably above normal (3.1°C to 5.0°C) at isolated places over south Gangetic West Bengal and Tamil Nadu, Puducherry & Karaikal; above normal (1.6°C to 3.0°C) at a few places over rest Gangetic West Bengal, Tripura and Andaman & Nicobar Islands; at isolated places over coastal Odisha. They were markedly below normal (-5.1°C or less) at most places over Haryana, Chandigarh

& Delhi, Uttar Pradesh, Rajasthan, West Madhya Pradesh, Gujarat Region and Madhya Maharashtra; at many places over East Madhya Pradesh and Saurashtra & Kutch; appreciably below normal ( $-3.1^{\circ}\text{C}$  to  $-5.0^{\circ}\text{C}$ ) at most places over Uttarakhand, Marathwada, Coastal Karnataka; at many places over Assam & Meghalaya, North Interior Karnataka and Telangana; at a few places over Himachal Pradesh, Punjab, Vidarbha and Konkan & Goa; at isolated places over Coastal Andhra Pradesh & Yanam.; below normal ( $-1.6^{\circ}\text{C}$  to  $-3.0^{\circ}\text{C}$ ) at most places over Chhattisgarh and at isolated places over Bihar, Rayalaseema and Lakshadweep and near normal over rest parts of the country. Yesterday, the highest maximum temperature of  $42.3^{\circ}\text{C}$  was reported at Brahmapuri (Vidarbha) over the plains of the country.

- Minimum Temperature Departures as on 19-05-2021: Minimum temperatures are appreciably above normal ( $3.1^{\circ}\text{C}$  to  $5.0^{\circ}\text{C}$ ) at a few places over Himachal Pradesh; above normal ( $1.6^{\circ}\text{C}$  to  $3.0^{\circ}\text{C}$ ) at most places over Sub-Himalayan West Bengal & Sikkim; at many places over Odisha and Jammu, Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad and at isolated places over Gangetic West Bengal and Tamilnadu, Puducherry & Karaikal. They are markedly below normal ( $-5.1^{\circ}\text{C}$  or less) at many places over East Rajasthan; at a few places over West Rajasthan and Haryana, Chandigarh & Delhi; appreciably below normal ( $-3.1^{\circ}\text{C}$  to  $-5.0^{\circ}\text{C}$ ) at most places over East Madhya Pradesh; at many places over a few places over West Uttar Pradesh and Gujarat Region; at a few places over West Madhya Pradesh, Vidarbha and Telangana; at isolated places over Saurashtra & Kutch; below normal ( $-1.6^{\circ}\text{C}$  to  $-3.0^{\circ}\text{C}$ ) at most places over Konkan & Goa; at many places over Coastal Karnataka and Bihar; at a few places over Chhattisgarh; at isolated places over Assam & Meghalaya, Jharkhand near normal over rest parts of the country. Today, the lowest minimum temperature of  $15.8^{\circ}\text{C}$  is reported at Erinpura/Jawai Dam Site (West Rajasthan) over the plains of the country

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

- 19 May (Day 1): Thunderstorm with lightning & squall (speed reaching 50-60 kmph) very likely at isolated places over Uttarakhand and East Rajasthan; with lightning & gusty wind (speed reaching 40-50 kmph) at isolated places over West Uttar Pradesh; with lightning & gusty wind (speed reaching 30-40 kmph) at isolated places over Himachal Pradesh, Haryana, Chandigarh & Delhi, East Uttar Pradesh, Jharkhand, Gangetic West Bengal, Konkan & Goa, Kerala & Mahe and Lakshadweep and with lightning at isolated places over Madhya Pradesh, Vidarbha, Chhattisgarh, Bihar, Sub-Himalayan West Bengal & Sikkim, Odisha, Andaman & Nicobar Islands, Arunachal Pradesh, Assam & Meghalaya,

Nagaland, Manipur, Mizoram & Tripura, Madhya Maharashtra, Marathwada, Coastal Andhra Pradesh & Yanam, Telangana, Rayalaseema, Karnataka and Tamil Nadu, Puducherry & Karaikal. Heavy to Very Heavy Rainfall with Extremely Heavy Falls at isolated places very likely over Uttarakhand; Heavy to Very Heavy Rainfall at isolated places over West Uttar Pradesh and Assam & Meghalaya and Heavy Rainfall at isolated places over Himachal Pradesh, Haryana, East Rajasthan, Konkan & Goa, north Madhya Pradesh, Sub-Himalayan West Bengal & Sikkim, Arunachal Pradesh, Nagaland, Manipur, Mizoram & Tripura, Tamil Nadu, Puducherry & Karaikal and Kerala & Mahe. Squally wind with wind speed reaching 40-50 kmph gusting to 60 kmph is very likely over southwest Arabian Sea. Squally. Fishermen are advised not to venture into these.

- 20 May (Day 2): Thunderstorm with lightning & gusty wind (speed reaching 30-40 kmph) very likely at isolated places over Himachal Pradesh, Uttarakhand, Jharkhand, Assam & Meghalaya, Gangetic West Bengal, Kerala & Mahe and Lakshadweep and with lightning at isolated places over Uttar Pradesh, Madhya Pradesh, Vidarbha, Chhattisgarh, Bihar, Sub-Himalayan West Bengal & Sikkim, Odisha, Andaman & Nicobar Islands, Arunachal Pradesh, Nagaland, Manipur, Mizoram & Tripura, Konkan & Goa, Coastal Andhra Pradesh & Yanam, Coastal & South Interior Karnataka and Tamil Nadu, Puducherry & Karaikal. Heavy to Very Heavy Rainfall at isolated places very likely over Uttarakhand and Sub-Himalayan West Bengal & Sikkim and Heavy Rainfall at isolated places over Arunachal Pradesh, Assam & Meghalaya, West Uttar Pradesh and Tamil Nadu, Puducherry & Karaikal. Squally wind (speed reaching 40-50 kmph gusting to 60 kmph) likely to prevail over Southeast Bay of Bengal & adjoining South Andaman Sea. Fishermen are advised not to venture into these areas. Fishermen are advised not to venture into these
- 21 May (Day 3): Thunderstorm with lightning & gusty wind (speed reaching 40-50 kmph) very likely at isolated places over Andaman & Nicobar Islands; with lightning & gusty wind (speed reaching 30-40 kmph) at isolated places over Jharkhand, Gangetic West Bengal, Odisha, Kerala & Mahe and Lakshadweep and with lightning at isolated places over Bihar, Sub-Himalayan West Bengal & Sikkim, Vidarbha, Assam & Meghalaya, Coastal Andhra Pradesh & Yanam, Coastal & South Interior Karnataka and Tamil Nadu, Puducherry & Karaikal. Heavy Rainfall at isolated places very likely over Sub-Himalayan West Bengal & Sikkim, Andaman & Nicobar Islands and Assam & Meghalaya. Squally wind (speed reaching 40-50 kmph gusting to 60 kmph) likely to prevail over Southwest Arabian Sea, Southwest & adjoining West central Bay of Bengal, and along & off

Tamil Nadu-Andhra Pradesh coasts; East central Bay of Bengal and adjoining South Andaman Sea. Fishermen are advised not to venture into these areas.

- 22 May (Day 4): Thunderstorm with lightning & gusty wind (speed reaching 40-50 kmph) likely at isolated places over Andaman & Nicobar Islands; with lightning & gusty wind (speed reaching 30-40 kmph) at isolated places over West Rajasthan, Bihar and Kerala & Mahe and with lightning at isolated places over Coastal & South Interior Karnataka, Tamil Nadu, Puducherry & Karaikal and Lakshadweep. Heavy to Very Heavy Rainfall at isolated places likely over Andaman & Nicobar Islands. Squally wind (speed reaching 40-50 kmph gusting to 60 kmph) likely to prevail over Southwest Arabian Sea. Squally wind (speed reaching 45-55 kmph gusting to 65 kmph) likely over Southwest & adjoining Westcentral Bay of Bengal, and along & off Tamil Nadu-Andhra Pradesh coasts, East central Bay of Bengal and adjoining Andaman Sea. Fishermen are advised not to venture into these areas.
- 23 May (Day 5): Thunderstorm with lightning & gusty wind (speed reaching 40-50 kmph) likely at isolated places over Andaman & Nicobar Islands; with lightning & gusty wind (speed reaching 30-40 kmph) at isolated places over West Rajasthan and Kerala & Mahe and with lightning at isolated places over Coastal & South Interior Karnataka, Tamil Nadu, Puducherry & Karaikal and Lakshadweep. Heavy Rainfall likely at isolated places over Andaman & Nicobar Islands. Squally wind speed reaching 40-50 kmph gusting to 60 kmph likely to prevail over Southwest Arabian Sea, 45-55 kmph gusting to 65 kmph likely over Southwest & adjoining Westcentral Bay of Bengal, and along & off Tamil Nadu-Andhra Pradesh-south Odisha coast, 55-65 kmph gusting to 75 kmph likely over East central Bay of Bengal and adjoining Andaman Sea. Fishermen are advised not to venture into these areas
- The weather outlook for seven days i.e., 19 May to 27 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)**

### **West bengal**

#### **Weather condition:**

Weather conditions during the 19th week at Mohanpur, West Bengal: Maximum temperature: 30.0 to 34.4 0C, Minimum temperature: 20.5 to 25.5 0C, bright sun shine hours: 2.2 to 10.3 hours, Morning-time relative Humidity: 84% to 96%, after noon-time

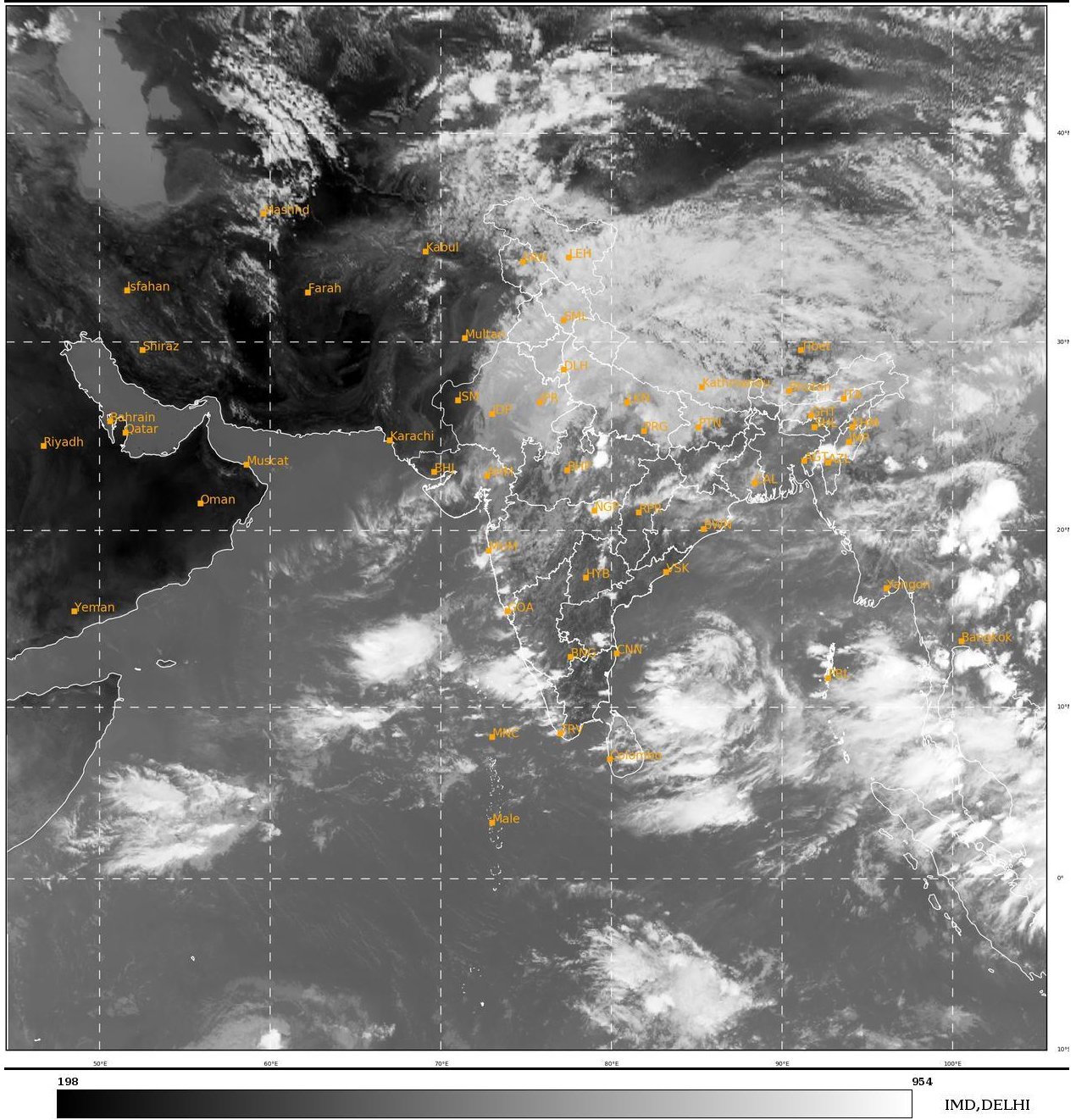
R.H: 54% to 93%. Total weekly pan evaporation: 24.1 mm, Total rainfall: 56.0 mm and average daily wind speed is around 1.97 km/h.

### Contingency measure:

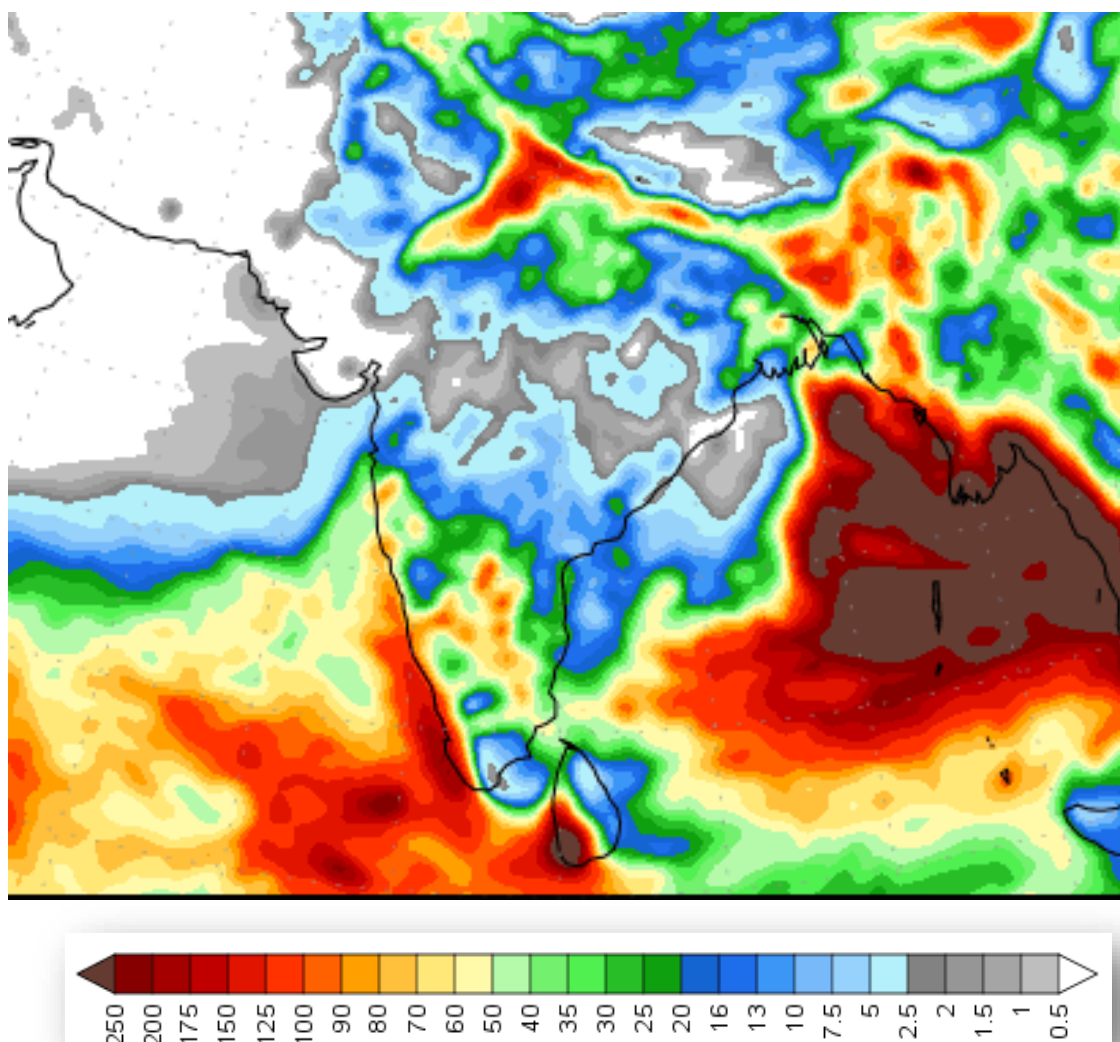
- Boro-rice: If more than 80% grains ripened harvest the crop. After harvesting, dry the crop properly. Moderate rainfall is expected on 14 May. So, harvest the crop according to the climatic situations.
- Jute : Complete the intercultural operations and after that apply top dressing. For crops of three-week stage, apply 6 to 7 Kg Urea (per bigha) as first top dressing and for crops of six-week stage apply the same amount of fertilizer as second top-dressing. Under prevalent weather situation, there is chance of the attack of weevil. To control it apply 2ml Endosulphan per lit of water.
- Tomato: For controlling tomato white fly don't spray same pesticide repeatedly on same field. Spray Imidacloprid (17.8 sl) 0.8 ml/lit of water or, acetamiprid 1 ml/lit of water to control the white fly.;
- Okra: To control the white fly and jassid of Vindi, spray acetamiprid 20 % s.p. @ 1 gm/lit. of water.;
- Bottle Gourd: If infestation is high of Pumpkin Beetle in Bottle Gourd, then you can apply 10 kg/ acre Fenvalerate 0.4% dust or Cholorpyrifos 1.5% dust spray on the leaves. You can spray Cholorpyrifos+ Cypermethrin 1.5 ml/lit of water or Cholorpyrifos 2.5 ml/lit of water.;
- Mango: There is a chance of an attack of fruit fly in Mango during the forecasted period. Farmers may use the Culior trap in their field or spray Fipronil 5% SC @ 1ml per liter of water to prevent the attack. Spraying must be done on a clear sunny day during morning hours.

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

19-05-2021/(0800 to 0826) GMT  
19-05-2021/(1330 to 1356) IST



**Figure: 1. Latest available satellite picture as on 19 May 2021 at 1356 Hrs (IST). (Source: IMD).**



**Figure:2. Precipitation forecast for 19 May to 27 May 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.*