

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

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

### **Daily Crop Weather Information as on 22 April 2021**

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

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

- Under the influence of a fresh active Western Disturbance; fairly widespread to widespread rainfall/snowfall with isolated thunderstorm/gusty winds very likely over Western Himalayan Region (Jammu, Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, Himachal Pradesh and Uttarakhand) during 22nd-24th April and isolated to scattered rainfall with isolated thunderstorm/gusty winds also very likely over adjoining plains of Northwest India during the same period.
- A North-South trough runs from south Madhya Maharashtra to south Tamil Nadu and a cyclonic circulation lies over south Tamil Nadu & neighbourhood in lower tropospheric levels. Under their influence, isolated to scattered rainfall/thunderstorm very likely over south Peninsular India during next 4-5 days. Isolated heavy rainfall also likely over South Interior Karnataka on 22nd & 23rd and Kerala & Mahe during 22nd-24th April, 2021.
- No significant heat wave conditions likely over the country during next 4-5 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 hrs IST of today): at most places over Jammu, Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, Himachal Pradesh and Uttarakhand; at many places over Andaman & Nicobar Islands and Gangetic West Bengal; at a few places over Arunachal Pradesh, Assam & Meghalaya, Sub-Himalayan West Bengal, Odisha, East Uttar Pradesh, Punjab and Kerala & Mahe and at isolated places over Nagaland, Manipur, Mizoram & Tripura, Jharkhand, Bihar, West Uttar Pradesh, East Rajasthan, Chhattisgarh, Telangana, Rayalseema, Karnataka and Tamilnadu, Puducherry & Karaikal
- Heavy rainfall recorded (from 0830 hours IST of yesterday to 0830 hrs IST of today): at isolated places over Himachal Pradesh, Odisha and South Interior Karnataka.

- Thunderstorm/Hail observed (from 0830 hours IST of yesterday to 0830 hrs IST of today): Thunderstorm at many places over Himachal Pradesh and Uttarakhand; at a few places over Kerala & Mahe and at isolated places over Punjab, Haryana, Chandigarh & Delhi, East Rajasthan, Madhya Pradesh, Uttar Pradesh, Bihar, Chhattisgarh, Jharkhand, Odisha, West Bengal & Sikkim, Nagaland, Manipur, Mizoram & Tripura, South Interior Karnataka and Rayalseema. Hailstorm observed at isolated places over Himachal Pradesh.
- Maximum Temperature Departures as on 21-04-2021: Maximum temperatures were appreciably above normal (3.1°C to 5.0°C) at many places over Arunachal Pradesh and Assam & Meghalaya; above normal (1.6°C to 3.0°C) at most places over Nagaland, Manipur, Mizoram & Tripura; at many places over Gangetic West Bengal ; at isolated places over Tamilnadu, Puducherry & Karaikal, Saurashtra & Kutch and Odisha. They were markedly below normal (-5.1°C or less) at most places over Punjab; at many places over Jammu, Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, Himachal Pradesh and Haryana, Chandigarh & Delhi; appreciably below normal (-3.1°C to -5.0°C) at many places over Chattisgarh and East Uttar Pradesh; at a few places over Andaman & Nicobar Islands and below normal (- 1.6°C to -3.0°C) at most places over Uttrakhand, Rajasthan, West Uttar Pradesh, Vidarbha and Bihar; at many places over Madhya Pradesh and isolated places over Madhya Maharashtra, Coastal Andhra Pradesh & Yanam and Telangana and near normal over rest parts of the country. Yesterday, the highest maximum temperature of 42.0°C was reported at Jamshedpur (Jharkhand).
- Minimum Temperature Departures as on 22-04-2021: Minimum temperatures are above normal (1.6°C to 3.0°C) at a few places over Arunachal Pradesh, Sub-Himalayan West Bengal & Sikkim, Odisha, Coastal Andhra Pradesh & Yanam and Lakshadweep; at isolated places over Assam & Meghalaya and Tamilnadu, Puducherry & Karaikal. They are markedly below normal (-5.1°C or less) at a few places over East Uttar Pradesh and East Rajasthan; appreciably below normal (-3.0°C to -5.0°C) at many places over Jammu, Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, Punjab and Haryana, Chandigarh & Delhi; at a few places over West Uttar Pradesh and Madhya Pradesh; at isolated places over West Rajasthan, Gangetic West Bengal and Telangana; below normal (-1.6°C to -3.0°C) at most places over Himachal Pradesh; at many places over Uttarakhand and Vidarbha; at a few places over Bihar, Chhattisgarh and Kerala & Mahe and near normal over rest parts of the country. Today, the lowest minimum temperature of 13.2°C is reported at Sikar (East Rajasthan) over the plains of the country.

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

- 22 April (Day 1): Thunderstorm with lightning, hail & gusty wind (speed reaching 40-50 kmph) very likely at isolated places over Sub-Himalayan West Bengal & Sikkim; with lightning, hail & gusty wind (speed reaching 30-40 kmph) at isolated places over Telangana; with lightning & gusty wind (speed reaching 30-40 kmph) at isolated places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, Himachal Pradesh, Uttarakhand, Punjab, Bihar, Jharkhand, Gangetic West Bengal, Odisha and Kerala & Mahe and with lightning at isolated places over Haryana, Chandigarh & Delhi, West Uttar Pradesh, Chhattisgarh, Arunachal Pradesh, Assam & Meghalaya, Coastal Andhra Pradesh & Yanam, Rayalaseema, Karnataka, Tamilnadu, Puducherry & Karaikal and Lakshadweep. Heavy rainfall very likely at isolated places over South Interior Karnataka and Kerala & Mahe.
- 23 April (Day 2): Thunderstorm with lightning & gusty wind (speed reaching 30-40 kmph) very likely at isolated places over Uttarakhand, Rajasthan and Kerala & Mahe and with lightning at isolated places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, Himachal Pradesh, Punjab, Haryana, Chandigarh & Delhi, West Uttar Pradesh, Gangetic West Bengal, Arunachal Pradesh, Coastal Andhra Pradesh & Yanam, Telangana, Rayalaseema, Interior Karnataka and Tamilnadu, Puducherry & Karaikal. Heavy rainfall very likely at isolated places over South Interior Karnataka and Kerala & Mahe.
- 24 April (Day 3): Thunderstorm with lightning & gusty wind (speed reaching 30-40 kmph) very likely at isolated places over Kerala & Mahe and with lightning at isolated places over Telangana, South Interior Karnataka and Tamilnadu, Puducherry & Karaikal. Heavy rainfall very likely at isolated places over Kerala & Mahe.
- 25 April (Day 4): Thunderstorm with lightning & gusty wind (speed reaching 30-40 kmph) likely at isolated places over Kerala & Mahe and with lightning at isolated places over Chhattisgarh, Telangana, South Interior Karnataka and Tamilnadu, Puducherry & Karaikal.
- 26 April (Day 5): Thunderstorm with lightning & gusty wind (speed reaching 30-40 kmph) likely at isolated places over Kerala & Mahe and with lightning at isolated places over Arunachal Pradesh, Assam & Meghalaya, Chhattisgarh, Telangana and Tamilnadu, Puducherry & Karaikal.
- The weather outlook for seven days i.e., 22 Apr to 30 April 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 1.7 to 9.7 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 31.6 to 37.3 and 18.9 to 21.2 oC respectively. Wind velocity ranged from 3.6 to 4.8 km and wind was blowing from south westerly Direction.

#### **Contingency measure:**

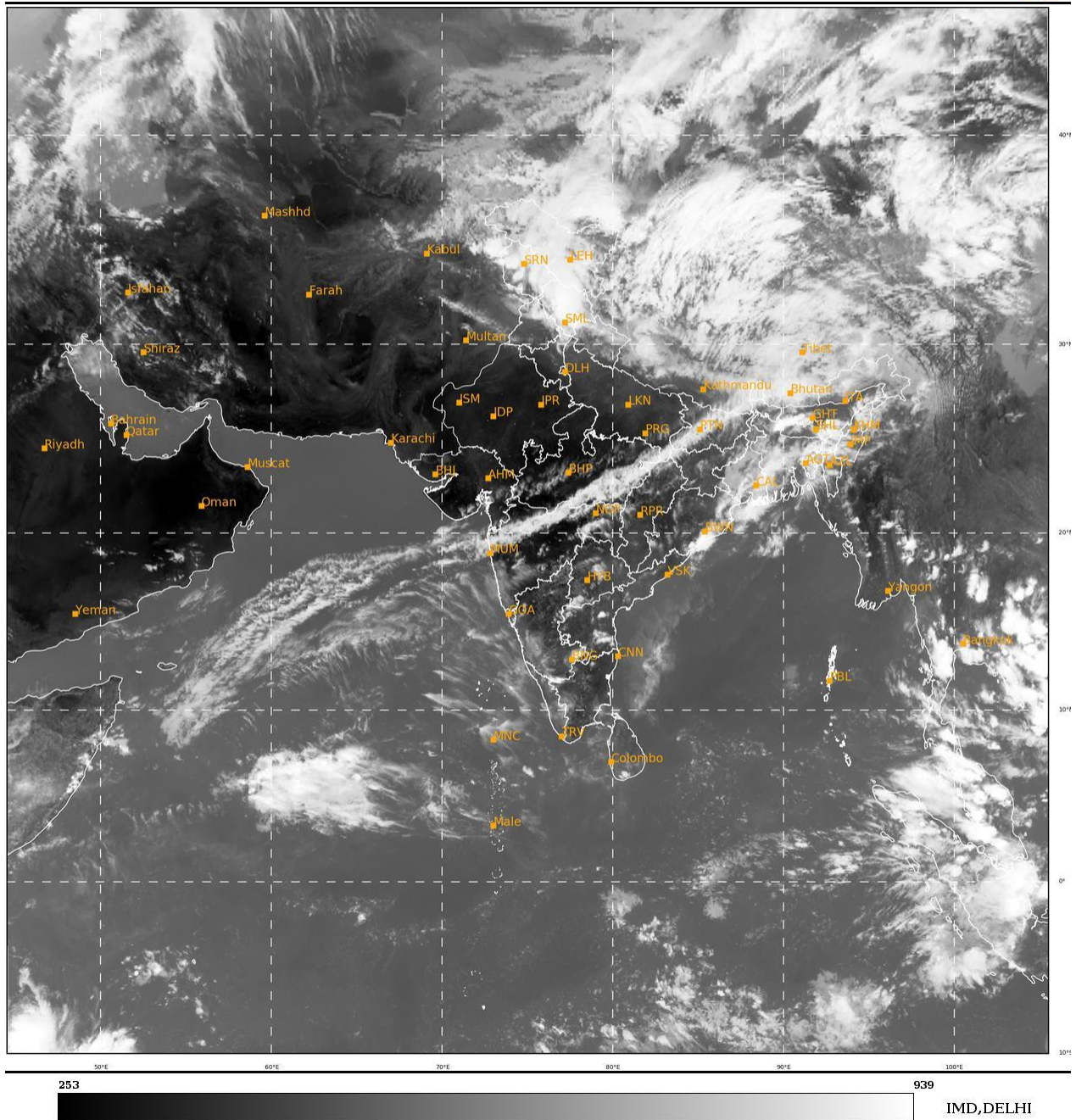
- General advisory: In case of manual field operations of harvesting/ picking, accomplish the operation in 4-6 feet spaced strips assigning one strip to one person. This will ensure adequate spacing between the engaged labour. All the persons engaged should use masks and ensure hand washing with soap at reasonable intervals. Maintain safe distance of 4-6 feet during rest, taking of meals, transfer of produce at collection point, loading/unloading. In hotspot areas of Covid-19, it is advise to sanitized the all machineries at the entry point and at regular interval. While carrying out field operations related to nutrient sprays and crop protection adequate precautions in handling of inputs, mixing, delivery and washing of equipment is to be undertaken. Follow the standard safety measures during the visit to market for the purchase of inputs/sale of produce
- SMS: Carry out harvesting of matured mango fruits during morning or in the evening hours and immediately keep the harvested fruits in shade to prevent spongy tissue development.
- Mango: Harvest the matured mango fruits in the morning and in the evening with the help on mango harvester at 80 to 85% maturity. Keep the harvested fruits in shade to prevent spongy tissue disease and from heat. withhold irrigation one month before fruit are ready for harvesting. Do not spray any insecticides/fungicides 8 days before harvesting of mango fruits. To prevent incidence of post-harvest diseases fruit rot on fruits, place the fruits in hot water of 52oC for 10 minutes and then keep for ripening. Use C.F.B. (corrugated fiber box) for packing. Transport of harvested fruits should be done preferably during night hours. There is possibility for incidence of fruit fly on mango fruits. Collect and destroy all fallen fruits and install ?Rakshak fruit fly trap? developed by

University @ 2 traps per acre. Provide irrigation to newly planted mango orchard @ 30 liters of water twice in week (1 years old), twice in 15 days interval (2 years old) and twice in month (3 years old). also use straw mulch

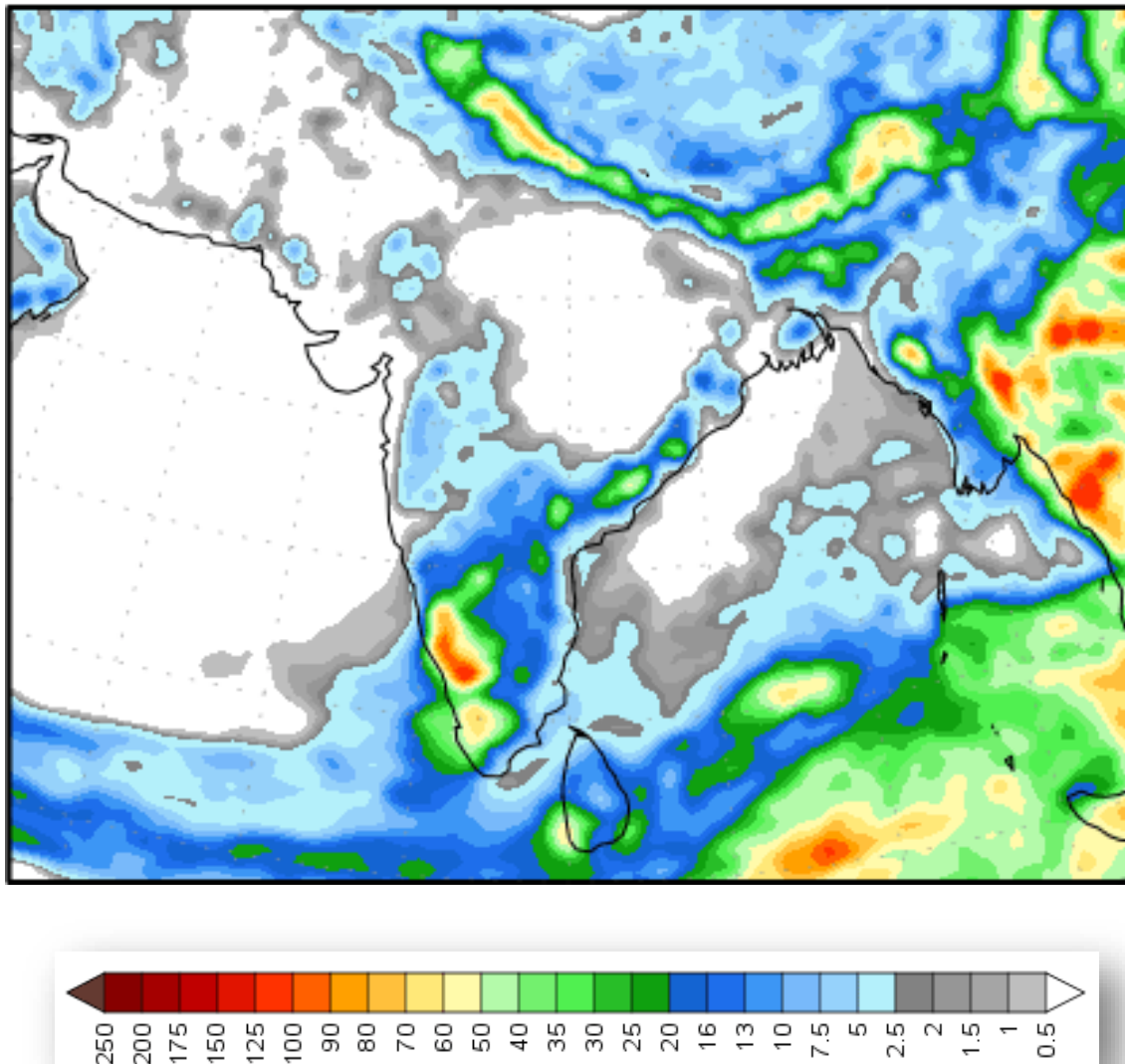
- Cashewnut: Due to forecast for increase in temperature, provide irrigation to newly planted cashew orchard @ 15 liters of water once in week. also use straw or polythene mulch in cashew orchard to reduce evaporation losses.
- Coconut: For new plantation of coconut, select the fertile, well drain soil. For control of eriophyid mite on coconut, neem-based insecticide Azadirachtin 5% @ 7.5 ml be mixed in equal quantity of water apply through root feeding three times in year (during month of October-November, January to February and April to May). Harvesting is avoided at least 45 days after treatment. In addition to this, spray Azadirachtin 10000 PPM 1% @ 4 ml per liter of water on bunch of nuts. Collect and destroy all infected inflorescence and nuts before spraying.
- Groundnut: Due to forecast for increase in temperature, provide irrigation to groundnut crop at 10 to 12 days interval where crop is in pod development stage
- Turmeric: For cultivation of turmeric, perform the deep ploughing operation to exposed the hibernate pupae or egg stages of insect and disease spores
- Ginger: For cultivation of ginger crop, perform the deep ploughing operation to exposed the hibernate pupae or egg stages of insect and disease spores
- Vegetable crops: Due to forecast for increase in temperature, provide irrigation to vegetable crop at 4-5 days interval
- Soil testing: Perform soil testing once in 3-4 year and where 2 to 3 crops are cultivated in a year, soil testing should be done at every year. For seasonal crops soil at 20-25 cm depth and for fruit crop, soil from 60 cms depth should be tested
- Animal husbandry: There is possibility of increase in temperature hence Provide clean, hygienic and plenty amount of drinking water to farm animals. To protect animals from heat, sprinkle cold water on animals during the afternoon, it will help to maintain the body temperature. To reduce the stress of heat in farm animals, provide roughages by mixing with solution of 1% gaggery and 0.5% salt separately. Vaccination against Black Quarter disease in farm animals under supervision of veterinary officers is advocated.
- Poultry: There is possibility of increase in temperature, hence in poultry shed, increase the water pot and provide adequate and clean water for drinking. Vaccination against Ranikhet disease in poultry birds under the supervision of veterinary officer is advocated.



22-04-2021/(0800 to 0826) GMT  
22-04-2021/(1330 to 1356) IST



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**Figure:2. Precipitation forecast for 22 to 30 Apr 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.*