

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

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

### **Daily Crop Weather Information as on 12 May 2020**

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

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

- Under the influence of an approaching Western Disturbance, scattered to fairly widespread rain/thundershowers likely over western Himalayan region and plains of Northwest India during 13th-15th May, 2020. Isolated thunderstorm accompanied with hail, gusty winds & lightning is also likely over these regions during the same period.
- Due to trough/wind discontinuity, isolated to scattered rain/thundershowers very likely over central & south peninsular India during next 4 days. Thunderstorms accompanied with lightning and gusty winds (30-40 kmph) at isolated places also likely over these regions during same period. Heavy rainfall also likely at isolated places over Kerala, Coastal & South Interior Karnataka and Lakshadweep during 15th-16th May, 2020. Squally weather is likely over Lakshadweep and Andaman & Nicobar Islands during 14th-16th May, 2020.
- Northeastern states are likely to experience scattered to fairly widespread rain/thundershowers during next 5 days. Isolated to scattered rain/thundershowers likely over adjoining Eastern states during this period. There could be isolated thundersqualls and heavy rain over Assam & Meghalaya on 13th & gusty winds, lightning & occasional heavy rainfall over the rest of the region during these 5 days.
- A Low Pressure Area is very likely to form over southeast Bay of Bengal & adjoining Andaman Sea during next 48 hours. Also, conditions are likely to become favourable for advance of Southwest Monsoon into some parts of southeast Bay of Bengal, south Andaman Sea & Nicobar Islands around 16th May, 2020.
- 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 Andaman & Nicobar Islands and Coastal

Karnataka; at a few places over Arunachal Pradesh, Uttarakhand, Punjab, Jammu & Kashmir, Ladakh, Gilgit-Baltistan, Muzaffarabad, Interior Karnataka and Kerala & Mahe and at isolated places over Bihar, Odisha, Uttar Pradesh, Haryana, Chandigarh & Delhi, Himachal Pradesh, Rajasthan, Konkan & Goa, Chhattisgarh, Madhya Pradesh, Sub-Himalayan West Bengal & Sikkim, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Vidarbha, Madhya Maharashtra, Marathwada and Tamil Nadu, Puducherry & Karaikal.

- Thunderstorm observed ( From 2030 hours IST of yesterday to 0830 hours IST of today) at isolated places over Punjab, Haryana, Madhya Maharashtra, Rajasthan, Madhya Pradesh, Chhattisgarh, Assam & Meghalaya, Telangana, Coastal Karnataka and Kerala & Mahe.
- Maximum Temperature Departures as on 11-05-2020: Maximum temperatures were appreciably above normal (3.1°C to 5.0°C) at most places over Nagaland, Manipur, Mizoram & Tripura; at isolated places over Saurashtra & Kutch, Gangetic West Bengal, South Interior Karnataka and Kerala & Mahe ; above normal (1.6°C to 3.0°C) at most places over Coastal Karnataka; at many places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan, Muzaffarabad; at a few places over Konkan & Goa and Lakshadweep and at isolated places over Assam & Meghalaya, West Madhya Pradesh, Madhya Maharashtra, Odisha, Telangana, Rayalaseema and Andaman & Nicobar Islands. They were markedly below normal (-5.0°C or less) at a few places over Uttar Pradesh and Bihar and at isolated places over Haryana, Chandigarh & Delhi, Jharkhand and Chhattisgarh; appreciably below normal (-3.1°C to -5.0°C) at most places over Punjab and at isolated places over Himachal Pradesh, Uttarakhand, East Madhya Pradesh, Vidarbha and Marathwada; below normal (-1.6°C to -3.0°C) at a few places over Odisha and Coastal Andhra Pradesh & Yanam and at isolated places over Rajasthan and Sub-Himalayan West Bengal & Sikkim and near normal over rest parts of the country. Yesterday, the highest maximum temperature of 44.0°C was reported at Phalodi (West Rajasthan).
- Minimum Temperature Departures as on 12-05-2020: Minimum temperatures are above normal (1.6°C to 3.0°C) at a few places over Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, South Interior Karnataka and Tamil Nadu, Puducherry & Karaikal; at isolated places over Gujarat state, Sub-Himalayan West Bengal & Sikkim, Kerala & Mahe and Madhya Maharashtra. They are markedly below normal ( -5.1°C or less) at isolated places over East Uttar Pradesh; appreciably below normal (-3.1°C to -5.0°C) at isolated places over West Uttar Pradesh, Punjab, East Rajasthan, Madhya Pradesh, Vidarbha and

Odisha; below normal (-1.6°C to -3.0°C) at most places over Chhattisgarh; at a few places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan, Muzaffarabad, Haryana, Chandigarh & Delhi and Coastal Karnataka; at isolated places over Himachal Pradesh, West Rajasthan, Gangetic West Bengal and Telangana and near normal over rest parts of the country. The lowest minimum temperature of 17.3°C reported at Fatehgarh (East Uttar Pradesh) over the plains of the country.

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

- 12 May (Day 1): Thunderstorm accompanied with lightning & squally winds (speed reaching 50-60 kmph) very likely at isolated places over Bihar; with lightning & gusty winds (speed reaching 40-50 kmph) at isolated places over Jharkhand and Assam & Meghalaya; with lightning & gusty winds (speed reaching 30-40 kmph) at isolated places over Punjab, Haryana, Chandigarh & Delhi, Uttar Pradesh, Madhya Pradesh, Vidarbha, Gangetic West Bengal, Andaman & Nicobar Islands, Nagaland, Manipur, Mizoram & Tripura, South Interior Karnataka, Lakshadweep, Kerala & Mahe and Tamil Nadu, Puducherry & Karaikal and with lightning at isolated places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan, Muzaffarabad, Chhattisgarh, Sub-Himalayan West Bengal & Sikkim, Odisha, Arunachal Pradesh, Madhya Maharashtra, Marathawada and North Interior Karnataka. Heavy rainfall very likely at isolated places over Andaman & Nicobar Islands and Tamil Nadu, Puducherry & Karaikal. Duststorm/thunderstorm accompanied with hail & gusty winds (speed reaching 30-40 kmph) very likely at isolated places over Rajasthan.
- 13 May (Day 2): Thunderstorm accompanied with lightning & squally winds (speed reaching 50-60 kmph) very likely at isolated places over Assam & Meghalaya; with lightning, hail & gusty winds (speed reaching 30-40 kmph) at isolated places over Himachal Pradesh; with lightning & gusty winds (speed reaching 30-40 kmph) at isolated places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan, Muzaffarabad, Punjab, East Uttar Pradesh, Rajasthan, East Madhya Pradesh, Jharkhand, Vidarbha, Arunachal Pradesh, Nagaland, Manipur, Mizoram & Tripura and Kerala & Mahe and with lightning at isolated places over West Madhya Pradesh, Bihar, Chhattisgarh, Gangetic West Bengal, Odisha and Lakshadweep. Heavy rainfall very likely at isolated places over Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura. Duststorm/thunderstorm accompanied with hail & gusty winds (speed reaching 30-40 kmph) very likely at isolated places over west Uttar Pradesh and with gusty

winds (speed reaching 30-40 kmph) at isolated places over Haryana, Chandigarh & Delhi.

- 14 May (Day 3): Thunderstorm accompanied with lightning, hail & gusty winds (speed reaching 30-40 kmph) at isolated places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan, Muzaffarabad, Himachal Pradesh, Uttarakhand, and Punjab; with lightning & gusty winds (speed reaching (30-40 kmph) at isolated places over Haryana, Chandigarh & Delhi, East Uttar Pradesh, Vidarbha, Bihar, Andaman & Nicobar Islands, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Madhya Maharashtra, Marathawada, Coastal Andhra Pradesh & Yanam, Telangana, Karnataka, Lakshadweep, Kerala & Mahe and Tamil Nadu, Puducherry & Karaikal and with lightning at isolated places over Madhya Pradesh, Chhattisgarh, Jharkhand, West Bengal & Sikkim, Odisha, Arunachal Pradesh and Konkan & Goa. Heavy rainfall likely at isolated places over Assam & Meghalaya. Duststorm/thunderstorm accompanied with hail & gusty winds (speed reaching 30-40 kmph) very likely at isolated places over Rajasthan and West Uttar Pradesh. Squally weather conditions with wind speed occasionally reaching upto 40-50 kmph very likely to prevail over Southeast Bay of Bengal & adjoining Equatorial Indian Ocean and south Andaman Sea. Fishermen are advised not to venture into these areas.
- 15 May (Day 4): Thunderstorm accompanied with lightning, hail & gusty winds (speed reaching 30-40 kmph) at isolated places over Himachal Pradesh and Uttarakhand; with lightning & gusty winds (speed reaching 40-50 kmph) at isolated places over Lakshadweep; with lightning & gusty winds (speed reaching 30-40 kmph) at isolated places over Chhattisgarh, Sub-Himalayan West Bengal & Sikkim, Odisha, Andaman & Nicobar Islands, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Madhya Maharashtra, Marathawada, Coastal Andhra Pradesh & Yanam, Telangana, Rayalaseema, Karnataka, Kerala & Mahe and Tamil Nadu, Puducherry & Karaikal and with lightning at isolated places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan, Muzaffarabad, Vidarbha, Bihar, Gangetic West Bengal, Arunachal Pradesh, Jharkhand and Konkan & Goa. Heavy rainfall likely at isolated places over Andaman & Nicobar Islands and Kerala & Mahe. Squally weather conditions with wind speed occasionally reaching upto 40-50 kmph likely to prevail over Southeast Bay of Bengal & adjoining Equatorial Indian Ocean and south Andaman Sea. Fishermen are advised not to venture into these areas.
- 16 May (Day 5): Thunderstorm accompanied with lightning & gusty winds (speed reaching 40-50 kmph) likely at isolated places over Lakshadweep; with lightning

& gusty winds (speed reaching 30-40 kmph) at isolated places over Chhattisgarh, Bihar, Odisha, Andaman & Nicobar Islands, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Madhya Maharashtra, Marathawada, Coastal Andhra Pradesh & Yanam, Rayalaseema, Coastal & South Interior Karnataka and Kerala & Mahe and with lightning at isolated places over Jharkhand, Gangetic West Bengal, Arunachal Pradesh and Konkan & Goa. Heavy rainfall likely at isolated places over Andaman & Nicobar Islands, Arunachal Pradesh, Coastal & South Interior Karnataka, Lakshadweep and Kerala & Mahe. Squally weather conditions with wind speed occasionally reaching upto 40-50 kmph very likely to prevail over Southeast Bay of Bengal & adjoining Equatorial Indian Ocean and south Andaman Sea. Fishermen are advised not to venture into these areas.

- The weather outlook for seven days i.e., 12 to 20 May 2020 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)**

### **Jharkhand**

#### **Weather condition:**

Good rainfall received during this week i.e 47.8 mm against the normal rainfall i.e 8.2 mm. Weekly Maximum and minimum temperature ranged from 28.4 to 33.4 and 19.4 to 23.4 . Actual weekly average maximum and minimum temperature was 31.3 and 21.1 deg C against the normal value of 36.7 and 23.6 deg C

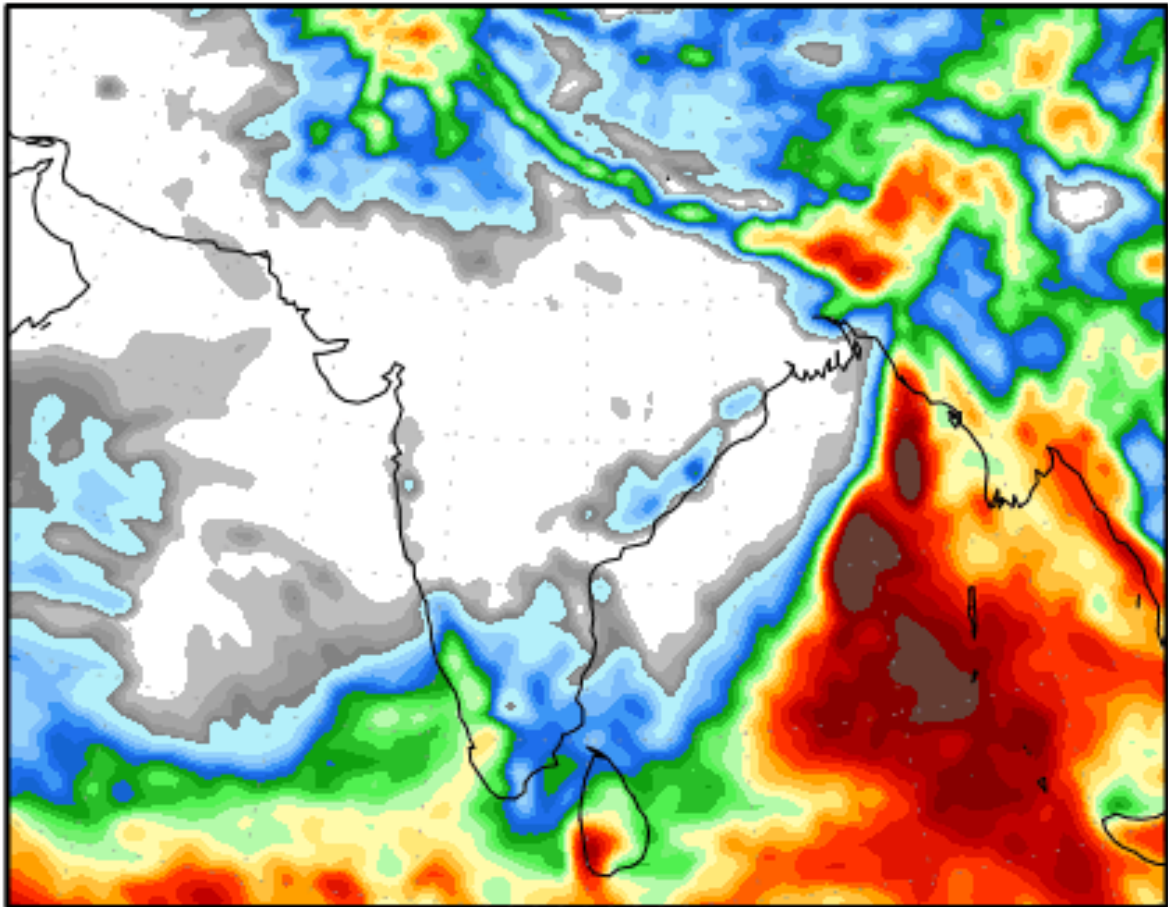
#### **Contingency measure:**

- General Advisory: Due to previous days rain, sufficient soil moisture is present in the field. Hence, farmers are advised to plough their field immediately and those farmers who wish to cultivate ginger, turmeric or oal (elephant foot yam) may start sowing after land preparation. Before sowing, seed must be treated with fungicide Bavistin. For seed treatment 2 gm of Bavistin may be mixed in 1 liter of water and seeds may be soaked at least for one hour in this solution. Apply full dose of compost and Muriate of Potash and half dose of Urea and D.A.P. at the time of final field preparation. Remaining part of Urea and D.A.P. should be applied after 60 and 90 days of sowing in two split doses. After sowing, mulch the field with straw / leaves etc. which will not only reduce weeds but also will conserve soil moisture. Seeds of ginger and turmeric should be with one or two eyes and of oal seed must have apex bud.

- **RICE:** Timely transplanted crops are at reproductive stage and this stage is sensitive of moisture stress. And hence maintain the bunds of the field to remain stagnate water and if there is a problem of weeds, control them immediately. At this stage there is possibility of the attack of the insects Gandhi bugs, which sucks the sap of the flowers. To control the attack of the insects, dusting of the insecticides like Chlorpyriphos dust or quinolphos dust or Methyl Parathion dust @ 10 kg per acre is recommended during evening. In absence of the insecticide, dusting of wood ash mixed with kerosin oil is also effective.
- **GINGER:** Select one of the improved variety of ginger seeds like Bardhwan, Suruchi, Suprabha, Nadiya etc. and sow the seed at a spacing of 40 cm (row to row) and 10 cm (plant to plant). 8 quintal of seeds, 80 quintal compost, 53 kg DAP, 70 kg Urea and 40 kg Muriate of potash is needed for cultivation in one acre.
- **DIOSCOREA (ELEPHANT FOOT YAM) :** Select one of the improved variety of yam (oal) seeds like Gajendra, Vidhan, Kusum, Sri Padma etc. and sow the seed at a spacing of 60 cm (row to row) and 60 cm (plant to plant). 56 quintal of seeds, 80 quintal compost, 53 kg DAP, 70 kg Urea and 54 kg Muriate of potash is needed for cultivation in one acre.
- **GREEN GRAM:** Inter culture operation must be performed after rain to maintain soil moisture for a longer period. Timely sown crops are at flowering stage. Attack of Thrips at this stage is not uncommon which causes dropping of flowers from the plant. If such symptoms appears, spray the insecticide like Trizophos or Profenphos @ 1 ml. per liter of water in evening time during clear weather condition.
- **DAINCHA:** At optimum soil moisture, farmers may sow the green manure crops like Sunhamp and Dhaincha to increase the soil fertility of Rice field. The seed rate for both is 20-25 kg per acre.
- **TURMERIC:** Select improved variety of turmeric seeds like Sonia and sow the seed at a spacing of 40 cm (row to row) and 15 cm (plant to plant). 8 quintal of seeds, 80 quintal compost, 53 kg DAP, 70 kg Urea and 40 kg Muriate of potash is needed for cultivation in one acre.
- **MANGO:** Select the suitable place for plantation of different fruit seedlings in rainy season and prepare/dug the pit and maintain the distance between pit as per requirement of fruit tree.
- **BOTTLE GOURD:** In some patches the cucurbitaceous vegetables are attacked by different insects like pumpkin beetle, fruit fly or red mites. If the crops are at fruiting stage, spray only neem based insecticide (Neemerin/ Neemetin/



**Figure: 1. Latest available satellite picture as on 12 May 2020 at 1227 Hrs (IST). (Source: IMD).**



**Figure:2. Precipitation forecast for 12 to 20 May 2020 (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.*