

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

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

### **Daily Crop Weather Information as on 03 July 2020**

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

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

- A cyclonic circulation lies over south Gujarat & neighbourhood in lower & mid tropospheric levels and another cyclonic circulation lies over East Uttar Pradesh & neighbourhood in lower tropospheric levels. High convergence of strong moist westerly/southwesterly winds at lower tropospheric levels from the Arabian sea very likely along west coast till 06th July and over plains of northwest India & central India from 03rd July, 2020. Under its influence, fairly widespread to widespread rainfall activity with: i) Isolated heavy to very heavy rainfall with isolated extremely heavy falls is very likely over north Konkan on 03rd & 04th July; Gujarat region on 04th & 05th July and over Madhya Maharashtra on 04th July. ii) Isolated heavy to very heavy falls is also very likely over Coastal Karnataka during 03rd-04th July and over Saurashtra & Kutch during 04th-06th July.
- Scattered to fairly widespread rainfall with isolated heavy falls most likely over Madhya Pradesh, Chhattisgarh and East Uttar Pradesh during next 5 days.
- Northeast India and East India very likely to continue to receive fairly widespread to widespread rainfall activity with isolated heavy falls during next 5 days. Isolated extremely heavy falls are very likely over Sub-Himalayan West Bengal & Sikkim during next 24 hours.
- Subdued rainfall activity over Western Himalayan Region and adjoining northwest India very likely to continue during next 24 hours and its distribution & intensity very likely to increase thereafter.
- The images showing the latest satellite picture in the figure. 1.

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

- Rain/Thundershowers observed (from 0830 hours IST to 1730 hours IST of yesterday): at most places over Coastal Karnataka, Kerala & Mahe and Lakshadweep; at a few places over Arunachal Pradesh, Assam & Meghalaya, Bihar, East Madhya Pradesh, Vidarbha and Konkan & Goa; at isolated places over Himachal Pradesh, East Uttar Pradesh, Gangetic West Bengal, Nagaland,

Manipur, Mizoram & Tripura, Odisha, East Rajasthan, West Madhya Pradesh, Marathawada, Gujarat region, Telangana, Rayalaseema, Coastal Andhra Pradesh & Yanam, Interior Karnataka, Tamil Nadu, Puducherry & Karaikal and Andaman & Nicobar Islands.

- Heavy rainfall observed at isolated places over Coastal Karnataka.
- Thunderstorm observed (from 0830 hours IST of yesterday to 0530 hours IST of today): at isolated places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, Uttarakhand, East Uttar Pradesh, Bihar, Assam & Meghalaya, West Bengal & Sikkim, Madhya Pradesh, Odisha, Chhattisgarh, Vidharbha, Coastal & North interior Karnataka, Coastal Andhra Pradesh & Yanam and Tamil Nadu, Puducherry & Karaikal.
- Yesterday, heat wave conditions observed in some parts over West Rajasthan and at isolated pockets over East Rajasthan.
- Maximum Temperature Departures as on 02-07-2020: Maximum temperatures were appreciably above normal (3.1°C to 5.0°C) at most places over Rajasthan; at many places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad and Haryana, Chandigarh & Delhi; at a few places over Himachal Pradesh and Odisha; at isolated places over Uttarakhand; above normal (1.6°C to 3.0°C) at most places over Punjab, Gangetic West Bengal, Gujarat region, Vidarbhha and North Interior Karnataka; at many places over Bihar, Jharkhand, Saurashtra & Kutch, West Madhya Pradesh and Chhattisgarh; at a few places over Uttar Pradesh, East Madhya Pradesh, Telangana, Madhya Maharashtra, Konkan & Goa and Kerala & Mahe; at isolated places over Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, South Interior Karnataka and Tamilnadu, Puducherry & Karaikal. They were appreciably below normal (-3.1°C to -5.0°C) at a few places over Arunachal Pradesh; at isolated places over Sub-Himalayan West Bengal & Sikkim and Andaman & Nicobar Islands; below normal (-1.6°C to -3.0°C ) at a few places over Coastal Andhra Pradesh & Yanam; at isolated places over Coastal Karnataka and Rayalaseema and near normal over rest parts of the country. Yesterday, the highest Maximum temperature of 44.8°C was reported at Bikaner & Phalodi (West Rajasthan).
- Minimum Temperature Departures as on 02-07-2020: Minimum temperatures were appreciably above normal (3.1°C to 5.0°C) at many places over East Rajasthan; at a few places over West Rajasthan; at isolated places over Himachal Pradesh, Punjab, Bihar and Sub-Himalayan West Bengal & Sikkim; above normal (1.6°C to 3.0°C) at most places over Gujarat Region and Gangetic West Bengal; at many places over Haryana, Chandigarh & Delhi and West Uttar Pradesh; at a few

places over Uttarakhand, West Madhya Pradesh, Odisha and Jharkhand; at isolated places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, East Madhya Pradesh, Vidarbha, Assam & Meghalaya, Saurashtra & Kutch, Coastal Andhra Pradesh & Yanam and Kerala & Mahe. They were below normal (-1.6°C to -3.0°C) at isolated places over Telangana and near normal over rest parts of the country. Yesterday, the lowest minimum temperature of 21.6°C was reported at Fatehgarh (East Uttar Pradesh) over the plains of the country.

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

- 03 July (Day 1): Heavy to very heavy rainfall at a few places with extremely heavy falls at isolated places very likely over Konkan & Goa; heavy to very heavy rainfall at isolated places with extremely heavy falls at isolated places very likely over Sub-Himalayan West Bengal & Sikkim; heavy to very heavy rainfall at isolated places over Bihar, Assam & Meghalaya, Madhya Maharashtra and Coastal Karnataka and heavy rainfall at isolated places over Andaman & Nicobar Islands, Arunachal Pradesh, Nagaland, Manipur, Mizoram & Tripura, East Uttar Pradesh, Coastal Andhra Pradesh & Yanam, Madhya Pradesh, Vidarbha, Chhattisgarh, Gangetic West Bengal, Jharkhand, Odisha, Uttarakhand, Marathwada, Telangana, Interior Karnataka and Kerala & Mahe. Heat wave conditions in isolated pockets very likely over West Rajasthan. Thunderstorm accompanied with lightning very likely at a few places over Bihar and at isolated places over Uttarakhand, Uttar Pradesh, East Rajasthan, Gujarat, Madhya Pradesh, Vidarbha, Chhattisgarh, Jharkhand, West Bengal & Sikkim, Odisha, Andaman & Nicobar Islands, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Coastal Andhra Pradesh & Yanam, Telangana, Rayalaseema, Karnataka, Kerala & Mahe, Tamil Nadu, Puducherry & Karaikal and Lakshadweep. Strong Wind (speed reaching 50-60 kmph) very likely over Southwest & Westcentral Arabian Sea. Squally Weather (speed reaching 40-50 kmph) likely over Southeast & Eastcentral Arabian Sea and along & off Maharashtra-Goa- Karnataka coasts and Lakshadweep. Fishermen are advised not to venture into sea over these areas.
- 04 July (Day 2): Heavy to very heavy rainfall at a few places with extremely heavy falls at isolated places very likely over Konkan & Goa; heavy to very heavy rainfall at isolated places with extremely heavy falls at isolated places very likely over Gujarat Region and Madhya Maharashtra; heavy to very heavy rainfall at isolated places over Uttarakhand, East Uttar Pradesh, East Madhya Pradesh, Sub-Himalayan West Bengal & Sikkim, Saurashtra & Kutch and Coastal Karnataka

and heavy rainfall at isolated places over West Uttar Pradesh, West Madhya Pradesh, Vidarbha, Chhattisgarh, Bihar, Jharkhand, Odisha, Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Marathwada, Coastal Andhra Pradesh & Yanam, Telangana, South Interior Karnataka and Kerala & Mahe. Thunderstorm accompanied with lightning very likely at isolated places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, Himachal Pradesh, Uttarakhand, Punjab, Haryana, Chandigarh & Delhi, Uttar Pradesh, East Rajasthan, Jharkhand, Bihar, Gangetic West Bengal, Coastal Andhra Pradesh & Yanam, Telangana, Rayalaseema, Karnataka, Kerala & Mahe, Tamil Nadu, Puducherry & Karaikal and Lakshadweep. Thunderstorm/Duststorm accompanied with lightning very likely at isolated places over West Rajasthan. Strong Wind (speed reaching 50-60 kmph) very likely over Southwest & Westcentral Arabian Sea and (speed reaching 40-50 kmph) likely over Eastcentral Arabian Sea and along & off Gujarat-Maharashtra coasts. Fishermen are advised not to venture into sea over these areas.

- 05 July (Day 3): Heavy to very heavy rainfall at isolated places with extremely heavy falls at isolated places likely over Gujarat Region; heavy to very heavy rainfall at isolated places over Uttarakhand, East Uttar Pradesh, Saurashtra & Kutch and Konkan & Goa and heavy rainfall at isolated places over Punjab, Haryana, Chandigarh & Delhi, West Uttar Pradesh, East Rajasthan, Madhya Pradesh, Chhattisgarh, Jharkhand, Sub-Himalayan West Bengal & Sikkim, Odisha, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura and Madhya Maharashtra. Thunderstorm accompanied with lightning likely at isolated places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, Himachal Pradesh, Uttarakhand, Punjab, Haryana, Chandigarh & Delhi, Uttar Pradesh, East Rajasthan and Jharkhand. Thunderstorm/Duststorm accompanied with lightning likely at isolated places over West Rajasthan. Strong Wind (speed reaching 50-60 kmph) likely over Southwest & Central Arabian Sea and (speed reaching 40-50 kmph) along & off Gujarat-Maharashtra coasts. Fishermen are advised not to venture into sea over these areas.
- 06 July (Day 4): Heavy to very heavy rainfall at isolated places likely over Gujarat State and heavy rainfall at isolated places over Uttarakhand, Punjab, Haryana, Chandigarh & Delhi, Uttar Pradesh, East Rajasthan, Madhya Pradesh, Chhattisgarh, Jharkhand, Gangetic West Bengal, Odisha, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Madhya Maharashtra and Konkan & Goa. Thunderstorm accompanied with lightning likely at isolated places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, Himachal Pradesh,

Uttarakhand, Punjab, Haryana, Chandigarh & Delhi, Uttar Pradesh, East Rajasthan and Jharkhand. Thunderstorm/Duststorm accompanied with lightning likely at isolated places over West Rajasthan. Strong Wind (speed reaching 50-60 kmph) likely over Southwest, Central & Northeast Arabian Sea and (speed reaching 40-50 kmph) along & off Gujarat, Maharashtra coasts. Fishermen are advised not to venture into sea over these areas.

- 07 July (Day 5): Heavy to very heavy rainfall at isolated places likely over Gujarat State and heavy rainfall at isolated places over Uttarakhand, Uttar Pradesh, Punjab, East Rajasthan, Madhya Pradesh, Chhattisgarh, Jharkhand, West Bengal & Sikkim, Odisha, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Coastal Karnataka, Vidharbha and Konkan & Goa. Thunderstorm accompanied with lightning likely at isolated places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, Himachal Pradesh, Uttarakhand, Punjab, Haryana, Chandigarh & Delhi, Uttar Pradesh, East Rajasthan, Bihar and Jharkhand. Thunderstorm/Duststorm accompanied with lightning likely at isolated places over West Rajasthan. Strong Wind (speed reaching 50-60 kmph) likely over Southwest, Central & Northeast Arabian Sea and (speed reaching 40-50 kmph) along & off GujaratMaharashtra coasts. Fishermen are advised not to venture into sea over these areas.
- The weather outlook for seven days i.e., 03 to 11 July 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)

### **Rajasthan**

#### **Weather condition:**

State: Light to moderate rainfall was received in the south eastern part of the state and hot & dry weather reported in western part of the state during the week. Jhalawar recorded highest rainfall (32.9 mm) followed by Baran (28.4 mm), Banswara (25.3 mm) and Bharatpur (18.9 mm) on 30th June. Eight district in the state reported more than 40 °C maximum temperature on 30th June. Bikaner recorded highest temperature (45 °C) followed by Churu (44.9°C), Jaisalmer & Ganganagar (43.4°C), Jodhpur (43.1), Barmer (42.4°C), Jaipur (41.9°C) and Ajmer (40.0°C). Western Rajasthan received 36.9 mm rainfall which was -5% less than normal (39.0 mm) and Eastern Rajasthan received 76.9 mm rainfall which was 8% more than normal (70.9 mm) from 1.06.2020 to 1.07.2020. At Centre: Cloudy weather and light rainfall reported during this week. Centre received

23.8 mm rainfall in one rainy days during the reporting period. Maximum temperature ranged between 32.0 °C to 37.6 °C with mean 35.2 °C which was 1.8 °C above normal and minimum temperature ranged between 19.4 °C to 25.0 °C with mean 23.5 °C which was 1.7 °C below normal Wind velocity ranged between 4.9 to 9.6 with mean 7.3 and sunshine hours 1.2 to 9.7 with mean 5.7 hours. Mean evaporation 7.0 mm.

### **Contingency measure:**

- Looking to possibilities of heavy rainfall, farmers are advised to make provision for water conservation at field.
- Looking to possibilities of rainfall, take up the sowing of maize. Improved varieties of maize:- Pratap QPM-1, HQPM-1, HQPM-5, PEHM-2 and Pratap hybrid maize-1, Bio-9637, Bio-9681, Navjot, Pratap maize-3 and Pratap maize-9. Seed rate 20 kg/ha. It is also advised to maintain row to row spacing of 60-75 cm. and plant to plant 18-25 cm. pre emergence spray of Atrazine 1-1.5 kg a.i/ha. in 800 litre of water is recommended for effective weed control in maize.
- Take up the sowing of soybean where adequate amount of rainfall received. Improved varieties of soybean:- Pratap soya-1, Pratap Raj soya- 2, NRC-37, JS-335, JS-93-05, JS-71-05, JS-9560 and RKS-45. Before sowing treat the seed with trichoderma 8 gram per kg seeds Use improved varieties of groundnut for sowing:- Pratap groundnut-1, Pratap groundnut-2, JL-24, GG-2, RG-141, J-38, DH-86, TG-37A, Pratap groundnut, TAG-24, GPBD-4 and RG-425. For maximize production and reduce losses farmers are advised to inter cropping should be done. For maize inter cropping, one row of soybean should sown after one row of maize at 30cm distance.
- In groundnut, after six rows of groundnut two rows of sesamum should be sown at 30cm distance. Transplanting of brinjal are advised for those farmers whose seedlings are ready.

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

03-07-2020/(0830 to 0857) GMT  
03-07-2020/(1400 to 1427) IST

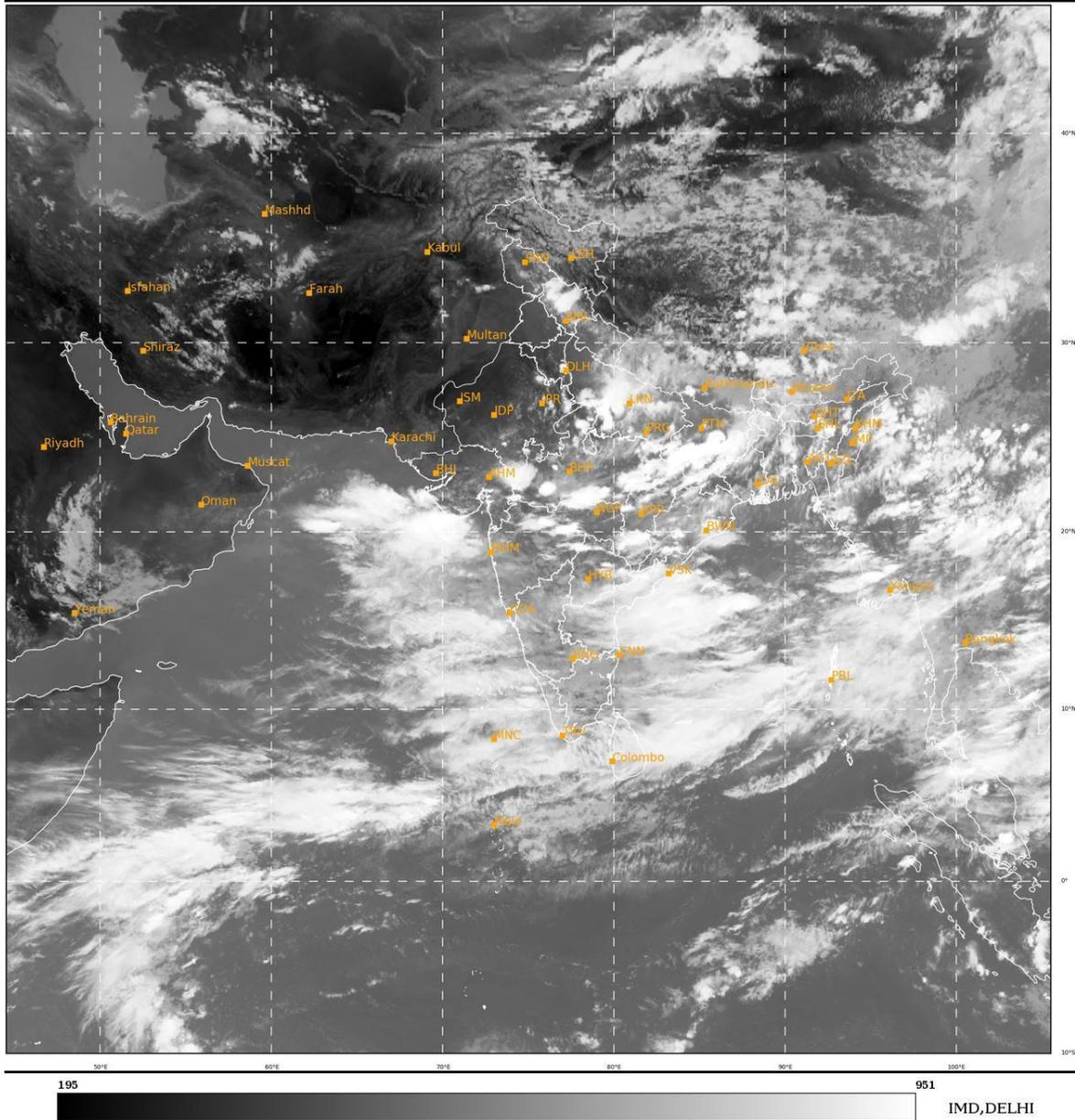
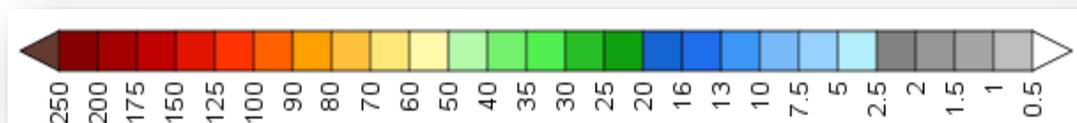
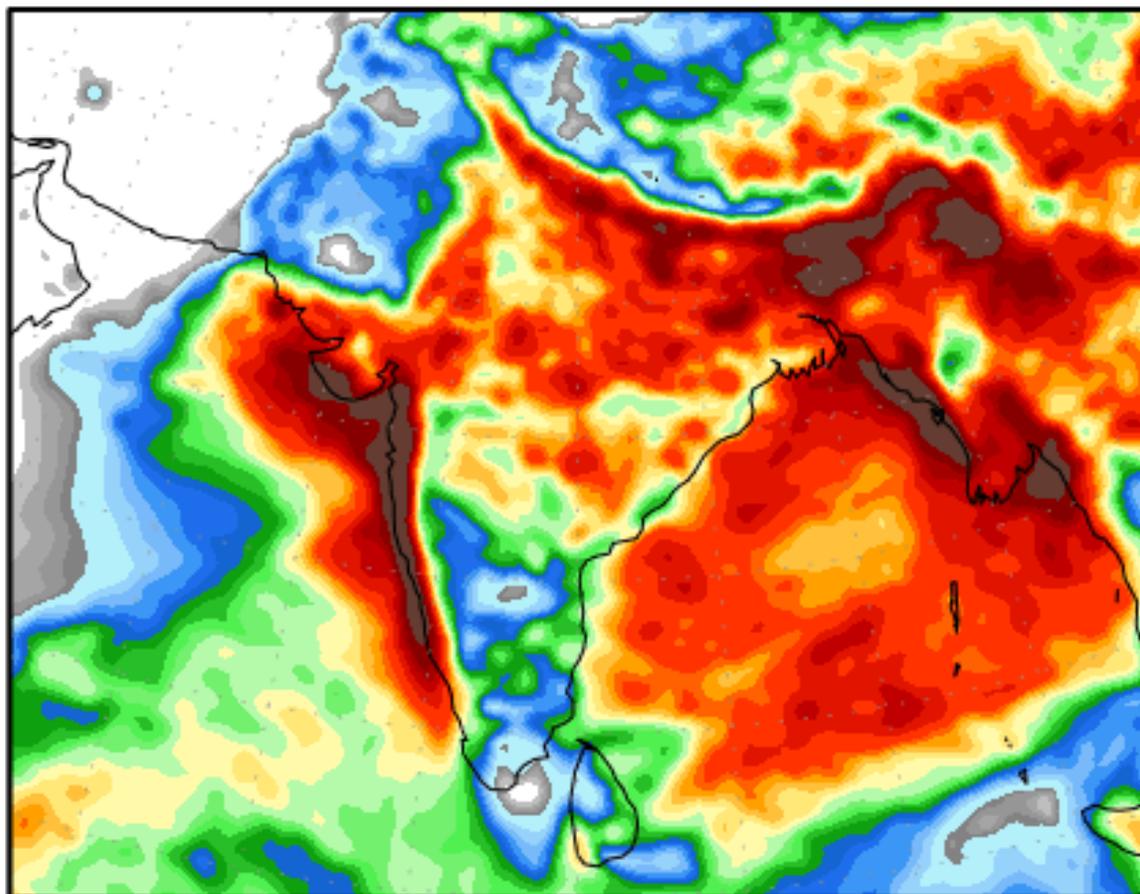


Figure: 1. Latest available satellite picture as on 03 July 2020 at 1427 Hrs (IST). (Source: IMD).



**Figure:2. Precipitation forecast for 03 to 11 July 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.*