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

# **Daily Crop Weather Information as on 29 August 2019**

Attention: Rajiv Maheshwari, OSD, ICAR

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

- The monsoon trough at mean sea level now passes through Bikaner, Jaipur, Tikamgarh, Ambikapur, Jamshedpur, Digha and thence southeastwards to eastcentral Bay of Bengal and extends upto 2.1 km above mean sea level.
- Western end of the monsoon trough is very likely to shift northwards from 30th August which is very likely to enhance rainfall activity over western Himalayan region & adjoining plains and cause scattered to fairly widespread rainfall with isolated heavy falls over the same area during 31st August to 01st September.
- The cyclonic circulation over north Bay of Bengal & neighbourhood extending upto 5.8 km above mean sea level tilting southwestwards with height persist. Under its influence, a low pressure area is likely to develop over north Bay of Bengal & neighbourhood during next 12 hours.
- Fairly widespread to widespread rainfall with isolated heavy rainfall likely over Odisha, Andaman & Nicobar Island, Coastal Karnataka and Kerala during next 3 days.

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

# **Main Weather Observations (IMD)**

- Rain/Thundershowers observed (from 0830 hours IST to 1730 hours IST of yesterday): at most places over Lakshadweep; at many places over Rajasthan, Kerala and Chhattisgarh; at a few places over Gujarat State, Rayalaseema, Odisha and Gangetic West Bengal and at isolated places over Punjab, Madhya Pradesh, Konkan & Goa, Madhya Maharashtra, Coastal & North Karnataka, Tamil Nadu, Puducherry & Karaikal, Coastal Andhra Pradesh, Sub-Himalayan West Bengal & Sikkim, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura and Tamil Nadu, Puducherry and Karaikal.
- Heavy rainfall observed at isolated places over East Rajasthan.

- Thunderstorm observed (from 1130 hours IST of yesterday to 0530 hours IST of today): at a few places over Sub Himalayan West Bengal & Sikkim; at isolated places over Uttarakhand, Chhattisgarh, West Rajasthan, Saurashtra & Kutch, Coastal Andhra Pradesh, Gangetic West Bengal, East Uttar Pradesh, East Madhya Pradesh, Jharkhand and Assam & Meghalaya.
- Maximum temperature departures as on 28-08-2019: Maximum temperatures were appreciably above normal (3.1°C to 5.0°C) at most places over Uttarakhand; at many places over Bihar and Sub-Himalayan West Bengal & Sikkim; at a few places over Jammu & Kashmir, Himachal Pradesh, Assam & Meghalaya and Coastal Andhra Pradesh and at isolated places over Punjab; above normal (1.6°C to 3.0°C) at most places over Haryana, Chandigarh & Delhi and Uttar Pradesh; at many places over Konkan & Goa, Marathawada and Telangana; at a few places over Gangetic West Bengal, Arunachal Pradesh, Madhya Maharashtra, North & South Karnataka, Rayalaseema and Kerala and at isolated places over Tamil Nadu, Puducherry & Karaikal. They were below normal (-1.6°C to -3.0°C) at isolated places over West Rajasthan, Gujarat State, West Madhya Pradesh, Nagaland, Manipur, Mizoram & Tripura and Andaman & Nicobar Islands and near normal over rest parts of the country.
- Minimum temperature departures as on 28-08-2019: Minimum temperatures were appreciably above normal (3.1°C to 53.0°C) at a few places over Sub-Himalaya West Bengal & Sikkim; at isolated places over Jammu & Kashmir, Himachal Pradesh, Punjab, Assam & Meghalaya and West Rajasthan; above normal (1.6°C to 3.0°C) at most places over Uttarakhand; at many places over West Uttar Pradesh and Bihar; at a few places over East Rajasthan and Coastal Andhra Pradesh & Yanam; at isolated places over East Uttar Pradesh, Nagaland, Manipur, Mizoram & Tripura, Saurashtra & Kutch and Tamil Nadu, Puducherry & Karaikal. They were appreciably below normal (-3.1°C to -5.0°C) at isolated places over West Madhya Pradesh; below normal (-1.6°C to -3.0°C) at isolated places over East Madhya Pradesh, Vidarbha and Chhattisgarh and near normal over rest parts of the country.

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

- 29 August (Day 1): Heavy rainfall very likely at isolated places over East Rajasthan, Chhattisgarh, Odisha, Andaman & Nicobar Islands, Gujarat, Coastal Karnataka and Kerala & Mahe. Thunder storm accompanied with lightning very likely at isolated places over Jharkhand and Gangetic West Bengal. Strong winds, speed reaching 45-55 kmph, are very likely to prevail over west central & southwest Arabian Sea, east central Bay of Bengal and along & off Andaman & Nicobar Islands. Fishermen are advised not to venture into these areas.
- 30 August (Day 2): Heavy rainfall at isolated places over Uttarakhand, West Uttar Pradesh, East Rajasthan, East Madhya Pradesh, Vidarbha, Chhattisgarh, Odisha,

Andaman & Nicobar Islands, Coastal Karnataka and Kerala & Mahe. Strong winds, speed reaching 45-55 kmph, are very likely to prevail over westcentral & southwest Arabian Sea, central & southeast Bay of Bengal and along & off Andaman & Nicobar Islands. Fishermen are advised not to venture into these areas.

- 31 August (Day 3): Heavy to very heavy rainfall likely at isolated places over Odisha and Andaman & Nicobar Islands and Heavy Rainfall at isolated places over Himachal Pradesh, Uttarakhand, Haryana, Chandigarh & Delhi, West Uttar Pradesh, East Rajasthan, Madhya Pradesh, Vidarbha, Chhattisgarh, Coastal Andhra Pradesh & Yanam, Telangana and Coastal Karnataka. Strong winds, speed reaching 45-55 kmph, are likely to prevail over westcentral & southwest Arabian Sea, central & southeast Bay of Bengal and along & off Andaman & Nicobar Islands. Fishermen are advised not to venture into these areas.
- 01 September (Day 4): Heavy to very heavy rainfall likely at isolated places over Odisha and Heavy Rainfall at isolated places over Himachal Pradesh, Uttarakhand, Haryana, Chandigarh & Delhi, Uttar Pradesh, East Rajasthan, Madhya Pradesh, Vidarbha, Chhattisgarh, Andaman & Nicobar Islands, Nagaland, Manipur, Mizoram & Tripura, Coastal Andhra Pradesh & Yanam, Telangana and Coastal Karnataka. Strong winds, speed reaching 45-55 kmph, are likely to prevail over westcentral & southwest Arabian Sea, central & southeast Bay of Bengal and along & off Andaman & Nicobar Islands. Fishermen are advised not to venture into these areas.
- 02 September (Day 5): Heavy to very heavy rainfall likely at isolated places over Odisha & Coastal Andhra Pradesh and Heavy Rainfall at isolated places over Himachal Pradesh, Uttarakhand, Haryana, Chandigarh & Delhi, Uttar Pradesh, East Rajasthan, Madhya Pradesh, Vidarbha, Chhattisgarh, Andaman & Nicobar Islands, Nagaland, Manipur, Mizoram & Tripura, Telangana and Coastal Karnataka. Strong winds, speed reaching 45-55 kmph, are likely to prevail over westcentral & southwest Arabian Sea, central & southeast Bay of Bengal and along & off Andaman & Nicobar Islands. Fishermen are advised not to venture into these areas.
- The weather outlook for the period of seven days i.e., 29 August to 06 September 2019 forecasted (Provided by Real-Time Weather Forecasts from NOAA/NCEP collected from http://monsoondata.org/wx2/) rain/thunder shower may occur over Sub-Himalayan West Bengal & Sikkim, Bihar, Madhya Pradesh, Odisha, Konkan & Goa, Vidarbha, Madhya Maharashtra, Marathwada, Konkan & Goa, Coastal Andhra Pradesh, Rayalaseema, North Interior Karnataka, Coastal & South Interior Karnataka, Kerala, Tamil Nadu & Puducherry, Lakshadweep, Andaman & Nicobar Islands and North Eastern States. (Fig. 2).

# **Agricultural activities (AICRPAM-CRIDA)**

#### Jammu

#### Weather condition:

No rainfall received in isolated places in Jammu state during past few days. The maximum temperature was ranged between 33-36°C and minimum temperature was ranged between 25-29°C.

### **Contingency measure:**

- Field crops: Paddy: Apply 2<sup>nd</sup> dose of N as top dressing in early & normal transplanted paddy just before panicle initiation stage, if crop is 55-65 DAT. Under late transplanted paddy crop, farmers are advised to top dress 1<sup>st</sup> dose of Urea if the crop is 30-35 days old after transplanting. Due to clear and humid weather in coming days, if attack of sheath blight in paddy crop is observed, spray the crop with Carbendazim @ 0.1%. Maize: Due to presence of sufficient moisture in the soil, top dress nitrogen (Urea) before tassel formation (30-40 days after sowing) during evening hours. Spray mancozeb 75WP @ 0.25%, if blight attack is observed. Weather is congenial for stem borer in maize, in that condition, whorl application of carbofuran/cartap granules @ 5gm/whorl is recommended. Spray Carbaryl @ 0.1 %, if attack of blister beetle is observed.
- *Kharif* Pulses (moong/mash): Weather is congenial for hairy caterpillar, if observed then destroy young larvae in gregarious phase. If population is high, spray Quinalphos @ 0.03% or Dichlorophos @ 0.05% during these days. Farmers are advised to manually rogue out yellow leaf plants (mosaic affected) at initial stage of attack. Control vector population (white fly) by spraying malathion 50 EC@ 1ml/lit. of water.
- Vegetables: Keep the field weed free by hoeing and weeding as weather will remain clear. Start nursery making practices for rabi season crops so that all the nurseries get ready by 20th-25th September. Remove yellow leaf plants as and when seen in field. Spray cypermethrin @ 1ml/lit. of water, against vector (white fly) of YVMV. Train and support the emerging vines on jute wires Monitor crop for the attack of fruit fly. Use pheromone traps @ 1 trap/10sq. m area to trap melon fly. Spray malathion @ 2ml/lit. of water, to control fruit fly attack. Manual pollination in the evening or morning hours is recommended for maximum production .
- Floriculture: Due chances of clear weather, weeding in rose beds is recommended. Transplanting of rooted cuttings as presence of moisture in the soil in the field is recommended. Spray Dithane M-45@ 2% + Bavistin @ 5% at fortnightly interval to

protect the young plants from septoria leaf spot. Seed sowing and transplanting of early raised seedlings.

- Summer fodder: Apply urea @ 75kg/ha after cut (40 days).
- Sericulture: Water logging in newly transplanted mulberry saplings should be avoided by digging proper exit channels. Unsold cocoons harvested during spring season should be kept in well ventilated rooms to avoid dampening in wire mesh racks for aeration and avoiding fungal and rodent attacks.
- Horticulture: Keep the basin area clean. To control fruit fly in fallen fruits, harvest fruit when hard. Keep the area clean. Continue rainy season plantation. Maintain proper drainage in orchards. Mushroom: Provide sufficient ventilation in the cropping room. Spraying of water should be done only after assessing the water requirement Put the yellow light traps for the management of mushroom flies. Malathion @ 0.01% and chlorothalonil @ 0.05% can be sprayed at weekly interval, if disease and insect incidence is observed.
- Apiculture: Give need based sugar feeding. Protect colonies from high temperature by shifting to shady areas/ cooler places or cover with wet gunny bags. Provide water source in the apiary. Keep colonies in stand to give protection against ants. Inspect colonies for infestation of wax moth or other disease.
- Poultry: Maintain proper ventilation at poultry house. Vaccinate chicks against new castle disease and gumboro disease. Spread clean litter material uniformly in the poultry house at thickness of 2-3 inches.
- Live stock: Provide adequate amount of fresh cool and clean drinking water to the animals at frequent intervals to save animals from heat stroke. Increase protein content in animal ration by 2%. Give vaccination against BQ and HS. Ensure green fodder to the livestock.
- Fisheries: Farmers should check the outlet and water level of the pond in order to avoid the escape out of fish live-stock from ponds. Apply screen to the outlet. In case of table size fish/last year stock, farmers may go for partial harvesting. Give supplementary feeding (3-5% of total fish biomass on daily basis), Liming & manuring (on monthly interval) should be done.

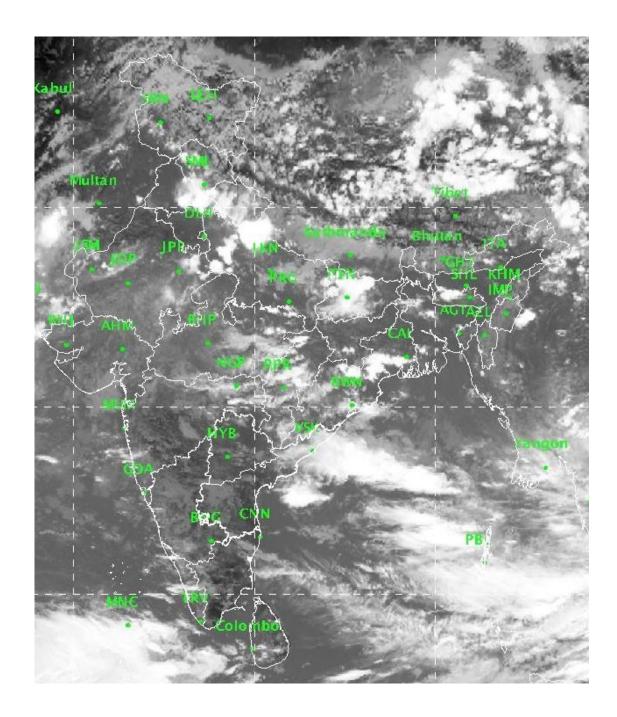
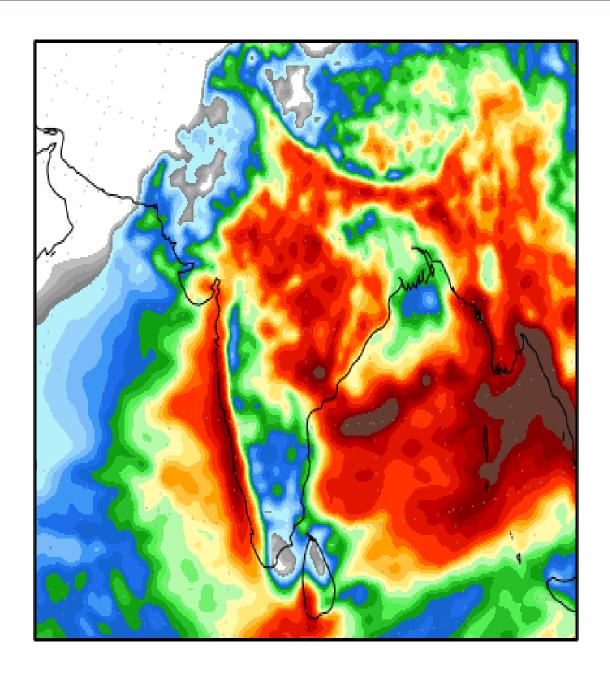


Figure: 1. Latest available satellite picture as on 29 August 2019 at 13:00 Hrs (IST). (Source: IMD).



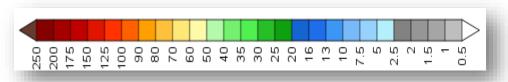


Figure: 2. Precipitation forecast for 29 August to 06 September 2019 (Source: NOAA NCEP).