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

## **Daily Crop Weather Information as on 04 October 2021**

### Attention: Rajiv Maheshwari, OSD, ICAR

#### Significant Weather Features (IMD)

- Conditions continue to remain favourable for commencement of withdrawal of Southwest Monsoon from some parts of Northwest India around 06th October, 2021.
- The Cyclonic Storm 'Shaheen' over north Oman & adjoining United Arab Emirates (UAE) continued to move west-southwestwards with a speed of about 15 kmph during past 06 hours, weakened into a Deep Depression and lay centred at 0830 hrs IST of today, the 04th October, 2021, over north Oman & adjoining United Arab Emirates (UAE), near latitude 23.5°N and longitude 56.4°E, about 200 km nearly to the west of Muscat (Oman). It is very likely to move westsouthwestwards and weaken into a Depression during next 12 hours.
- The Low Pressure Area over east Bihar and adjoining Sub-Himalayan West Bengal & Sikkim has become less marked. However the associated cyclonic circulation lies over Sub-Himalayan West Bengal & neighbourhood and extends upto 4.5 km above mean sea level. Under its influence; isolated heavy to very heavy falls very likely over Assam & Meghalaya and isolated heavy falls over Sub-Himalayan West Bengal & Sikkim during next 24 hours.
- A cyclonic circulation lies over coastal Tamilnadu & adjoining southwest Bay of Bengal and extends upto 5.8 km above mean sea level tilting southwestwards with height. A trough in easterlies runs from this above cyclonic circulation to Lakshadweep area across the interior Tamilnadu & Kerala in lower tropospheric levels. Another cyclonic circulation lies over southeast Arabian Sea between 4.5 km & 5.8 km above mean sea level. It is likely to persist during next 2-3 days. Under the influence of these systems:

i) Isolated heavy to very heavy falls very likely over Tamilnadu, Kerala and Coastal & South Interior Karnataka during 04th-06th October, 2021. Isolated extremely heavy falls also very likely over Kerala on 05th October, 2021.

ii) Isolated heavy rainfall very likely over south Konkan & Goa and south Madhya Maharashtra during 04th-08th October, 2021.

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

#### Main Weather Observations (IMD)

- Rainfall/Thundershowers observed (0830 hrs IST of yesterday to 0830 hrs IST of today) at most places over South interior Karnataka, Sub-Himalayan West Bengal & Sikkim, Assam & Meghalaya, Arunachal Pradesh; at many places over Coastal Karnataka, Kerala & Mahe and Lakshadweep; at a few places over Nagaland, Manipur, Mizoram & Tripura, Gangetic west Bengal, Odisha, Bihar, East Uttar Pradesh, Jammu, Kashmir, Ladakh, Gilgit-Baltistan and Ladakh, West Madhya Pradesh, Konkan & Goa, Chhattisgarh, Madhya Maharashtra and Tamilnadu, Puducherry & Karaikal and at isolated places over Himachal Pradesh, Punjab, Haryana, Chandigarh & Delhi, Jharkhand, West Uttar Pradesh, East Rajasthan, East Madhya Pradesh, Vidarbha, Marathwada, Gujarat state, Coastal Andhra Pradesh & Yanam, Telangana, Rayalseema, North Interior Karnataka and Andaman & Nicobar Islands.
- Heavy rainfall observed (0830 hrs IST of yesterday to 0830 hrs IST of today): Heavy to very rainfall at isolated places over Jharkhand, Meghalaya and Tamil Nadu and heavy rainfall at isolated places over Odisha, Sub-Himalayan West Bengal, West Madhya Pradesh, East Rajasthan, Gujarat Region, Assam, Konkan and Madhya Maharashtra.
- Thunderstorm observed (from 0830 hours IST of yesterday to 0830 hours IST of today): at many places over Sub-Himalayan West Bengal & Sikkim and at isolated places over Jammu, Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, Punjab, Uttar Pradesh, Assam & Meghalaya, Gangetic West Bengal, Bihar, Jharkhand, Odisha, Chhattisgarh, Madhya Pradesh, Telangana, Gujarat State, Madhya Maharashtra, Marathwada Tamil Nadu, Puducherry & Karaikal and Karnataka.
- Maximum Temperature Departures as on 03-10-2021: Maximum temperatures were above normal (1.6°C to 3.0°C) at many places over Gangetic West Bengal, Coastal Andhra Pradesh & Yanam and South Interior Karnataka; at a few places over Assam & Meghalaya, Odisha, Telangana, Madhya Maharashtra and Kerala & Mahe; at isolated places over Jammu, Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, Himachal Pradesh, Uttrakhand, Haryana, Chandigarh & Delhi, Uttar Pradesh, Chhattisgarh, Rayalaseema, Konkan & Goa and Andaman & Nicobar Islands. They were appreciably below normal (-3.1°C to -5.0°C) at many places over Sub-Himalayan West Bengal & Sikkim; at a few places over Bihar. They were below normal (-1.6°C to-3.0°C) at many places over Gujarat Region; at a few places over West Rajasthan and Saurashtra & Kutch; a isolated places over East Rajasthan, Madhya Pradesh and Tamil Nadu, Puducherry & Karaikal and

near normal over rest parts of the country. Yesterday, the highest maximum temperature of 38.4°C was reported at Ganganagar (West Rajasthan).

Minimum Temperature Departures as on 04-10-2021: Minimum temperatures are markedly above normal (5.1°C or more) at many places over Punjab; at a few places over Jammu, Kashmir, Ladakh, Gilgit-Baltistan and Muzaffarabad; normal (3.1°C to 5.0°C) appreciably above at most places over Haryana, Chandigarh & Delhi, East Uttar Pradesh and East Rajasthan; at many places over Uttarakhand, at a few places over west Rajasthan and West Madhya Pradesh; at isolated places over Saurashtra & Kutch, East Madhya Pradesh and West Uttar Pradesh; above normal (1.6°C to 3.0°C) at many places over Vidarbha and Marathwada; at a few places over Gujarat Region, Madhya Maharashtra, Konkan & Goa, Rayalaseema and Sub-Himalayan west Bengal & Sikkim and at isolated places over Kerala & Mahe, Tamilnadu, Puducherry & Karaikal, Coastal Andhra Pradesh & Yanam and Odisha and near normal over rest parts of the country. Today, the lowest minimum temperature of 19.0°C is reported at Mandla (East Uttar Pradesh) over the plains of the country.

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

- 04 October (Day 1): Heavy to very heavy rainfall very likely at isolated places over Meghalaya, Kerala & Mahe and Tamil Nadu, Puducherry & Karaikal and Heavy rainfall at isolated places over Sub-Himalayan West Bengal & Sikkim, Arunachal Pradesh, Nagaland, Manipur, Mizoram & Tripura, west Assam, Madhya Maharashtra, south Konkan & Goa, Lakshadweep and Coastal & South Interior Karnataka. Thunderstorm accompanied with lightning & hail very likely at isolated places over Himachal Pradesh and Uttarakhand and with lightning at isolated places over Jammu, Kashmir, Ladakh, Gilgit-Baltistan and Muzaffarabad, Punjab, north Haryana, Chandigarh, Uttar Pradesh, Madhya Pradesh, Vidarbha, Chhattisgarh, Bihar, Jharkhand, West Bengal & Sikkim, Odisha, Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Gujarat Region, Madhya Maharashtra, Marathwada, Konkan & Goa, South Interior Karnataka, Tamil Nadu, Puducherry & Karaikal and Kerala & Mahe. Squally weather (wind speed reaching 40-50 kmph) very likely over Southeast & Eastcentral Arabian Sea along & off Kerala coast and Lakshadweep area and over Southwest Bay of Bengal. Fishermen are advised not to venture into these areas.
- O5 October (Day 2): Heavy to very heavy rainfall with extremely heavy falls very likely at isolated places over Kerala & Mahe; Heavy to very heavy rainfall at isolated places over South Interior Karnataka and Tamil Nadu, Puducherry & Karaikal and Heavy rainfall at isolated places over Madhya Maharashtra, south

Konkan & Goa, Assam & Meghalaya, Lakshadweep and Coastal Karnataka. Thunderstorm accompanied with lightning very likely at isolated places over East Uttar Pradesh, Madhya Pradesh, Vidarbha, Chhattisgarh, Bihar, Jharkhand, Odisha, Sub-Himalayan West Bengal & Sikkim, Gujarat Region, Konkan & Goa, Madhya Maharashtra, Marathawada, Coastal Andhra Pradesh, Interior Karnataka, Tamilnadu, Puducherry & Karaikal and Kerala & Mahe. Squally weather (wind speed reaching 40-50 kmph) very likely over Southeast & Eastcentral Arabian Sea along & off Kerala coast and Lakshadweep area. Fishermen are advised not to venture into these areas.

- O6 October (Day 3): Heavy to very heavy rainfall very likely at isolated places over Coastal Karnataka and Heavy rainfall at isolated places over Madhya Maharashtra, south Konkan & Goa, Interior Karnataka, Kerala & Mahe and Tamilnadu, Puducherry & Karaikal. Thunderstorm accompanied with lightning very likely at isolated places over Odisha, Konkan & Goa, Madhya Maharashtra, Marathawada, Interior Karnataka, Tamilnadu, Puducherry & Karaikal and Kerala & Mahe.
- 07 October (Day 4): Heavy rainfall likely at isolated places over Konkan & Goa, Madhya Maharashtra and Coastal & North Interior Karnataka. Thunderstorm accompanied with lightning likely at isolated places over Konkan & Goa, Madhya Maharashtra, Marathawada and Interior Karnataka.
- 08 October (Day 5): Heavy rainfall likely at isolated places over Konkan & Goa and Madhya Maharashtra. Thunderstorm accompanied with lightning likely at isolated places over Konkan & Goa, Madhya Maharashtra and Marathawada
- The weather outlook for seven days i.e., 04 Oct to 12 Oct 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)**

# Himachal Pradesh

### Weather condition:

The maximum and minimum temperature ranged between 26.0 to 27.5 °C and 17.0 to 20.0 °C which was above normal by 0.4 to 2.1 °C and 0.5 to 3.3 °C, respectively. 29.8 mm rainfall was received during the week against the normal of 20.9 mm. The relative humidity varied between 65-100 % and sunshine hours between 0.5-10.0 hrs/day with variable sky conditions (Octa 1-8). The evaporation rate varied 1.7-4.0 mm per day.

#### **Contingency measure:**

- Kharif Crops: Rice: Farmers are advised to make bund for conserving rain water in the field. Bund should be higher and wider so that more rain water can be conserved in the field. Spray of bavistin @ 1 ml/litre in case of rice blast disease at 15 interval is advised. Rice hispa is expected in rice fields, for management clear the grasses from bunds or Spraying of recommended chemicals is advised.
- Maize: Constant monitoring of maize crop against attack of maize aphid is advised. In Maize, stalk rot is expected in this weather for control drench maize fields with Advisory for coming 5 Days: There is moderate rainfall expected in the region. Maximum temperature 30-33 0C and minimum temperatures 19-22 0C is expected during next five days. Relative humidity will remain between 82-98 per cent. The average wind speed in next five days will remain 6 km/h. Light clouds are expected. www.hillagric.ac.in/info/kisano\_ke\_liye\_soochna, email: ranars66@rediffmail.comPh.No. : +91- 1894232245 Fax: 91-1894 230406 bleaching powder @16 kg/ha.
- Pulses: In the standing crop of soybean, moong, urad, if the outbreak of whitefly, sucking insects is high, then spray the approved insecticides for control when the sky is clear. Ensure drainage in fields and weed free conditions. Hairy caterpillar is also appearing in mash and til crops. For control spray Cypermethrin 25 EC 0.5 ml /litres of water.
- High Hills: In high hilly intercultural operations and urea dose to peas, turnip, carrot, palak etc. is advised.
- Fodder Crops: The hay making process should be started and grasses may cut before flowering and dry during sunny days. Prepare silage out of extra fodder of maize to meet the requirement of fodder during lean periods, especially in the month of December and January.
- Vegetable Crops: Ensure proper drainage in vegetable crops. Use Light Trap to destroy harmful pests. For this, in a plastic tub or a large pot, mix water and a little kerosene or few ml insecticide and burn a bulb and keep it in the middle of the field at night. By attracting insects from light, they will fall on the same solution and die.
- Bhindi & Frenchbean: Monitoring of lady finger crop against attack of Fruit borer and mite is advised. Weed control in bhindi and frenchbean is advised.
- Tomato, Chilli, Capsicum And Brinjal: Weeding and hoeing in all crops and vegetables should be done for optimum growth. Shoot and fruit borer in brinjal and fruit borer in tomato crop is expected. Infested fruits and shoots should be collected and buried inside the soil. Installation of bird perches in tomato is

advised to control fruit borer insect. Installation of pheromone trap @ 2-3 traps per acre of crop field is advised for monitoring the fruit borer. If pest population is high, spraying of Chlorantraniliprole 18.5SC @ 0.4 ml/l is advised. Constant monitoring of the chilli crop against attack of mites and jassid is advised.

- Poly House Agriculture: Open the side and top for temperature control. During rains top and side bent should be closed. Incidence of white fly and mites expected in polyhouse. For control of these insect pests in polyhouses, spray of Spiromesifen 22.9 SC @ 1ml/l is recommended. Vegetables harvesting one week after spraying is advised. Advised to sow nursery of mid season cauliflower and cabbage in poly house in mid hills and lower region and advised transplanting of ageti cauliflower and cabbage nursery in fields.
- Agro Forestry: Nursery of medicinal plants viz. aswagandha, tulsi, digitalis, jangli bhindi and agarkara can be grown in the fields. Plantation of beunce can also be done. Trees saplings grown in the polythene bags may be shifted into the fields.
- Tea: Advised picking in tea at 8-10 days interval to maintain the quality and productivity. Lopping of shade tress advised in tea orchards. Weather is conducive for attack of blister blight in shady and high humid areas, for precautionary measure spray calixin @ 0.2% or folicure 0.1% and if attack is severe then repeats spray at 15 days with alternate spray of blitox 0.3% at seven days interval.
- Livestock: Monitor the animals for FMD and advised protect calves against parasites, get them dewormed with piperazine liquid @ 4 ml/kg body weight, first at 10 days of age, then 15 days and then monthly upto three months of age and then quarterly upto one year of age. Vaccination. Ecto-parasite attack is expected in this weather for control spray Butox @ 2ml per litre in cowshed Give mixture of hay & green fodder.
- Poultry: Make sure to deworm your older flocks every month against roundworms. Ensure proper ventilation in poultry houses. Replace the poultry houses with fresh litter and keep the houses clean and ensure drinking water to the birds. For precautionary measures spray formaline 40% @ 1litre in 9 litres of water in outside or surrounding of farm. Provide vitamin A and vitamin B complex with water.
- Mushrooms: Maintain room temperature 18-22oC and relative humidity around 85% for successful cultivation. Fungal Disease: Bavistin @.05%.
- Horticulture: Keep the basins of the plants free from weeds and well drained. The new growth appearing below bud union may be cut. If a termite outbreak

appears on the trees, spray Chlorpyriphos 20 EC @ 3ml/l. Monitor foliar pest on plants of Citrus species. Spray Chlorantraniliprole 18.5SC @ 0.4 ml/l or lambdacyhalothrin 4.90CS @0.8 ml/l for pomegranate butterfly. Advised recommended spray of chemicals for control of citrus canker.

- Floriculture: Intercultural operations and weeding to be done. Mite is also expected in carnation for control spray omite, pyromite 1ml per litres of water and Dicofol 2 ml or Spiromesifen 22.9 SC @ 1 ml per litres of water. In marigold blight is expected for control spray bavistin 2 g per litres of water spray. Weather is conducive for appearance of aphids in rose, for control spray dimethoate @1 ml per litres of water. Complete pinching and stalking in carnation should be done. For the control of green beetle in roses, spray recommended chemicals and dose.
- Water Storage: Farmers are advised make arrangement for storing rain water in pond made in the field. This water can be used for irrigation in the crops at suitable time during dry spell. Farmers are also advised to increase the amount of potash it helps in minimizing the losses due to the moisture stress during dry spell.

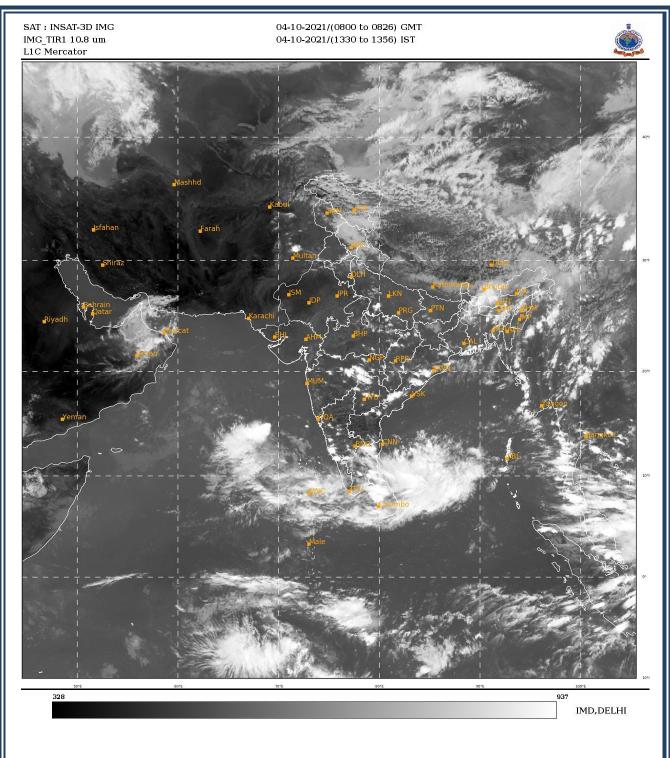
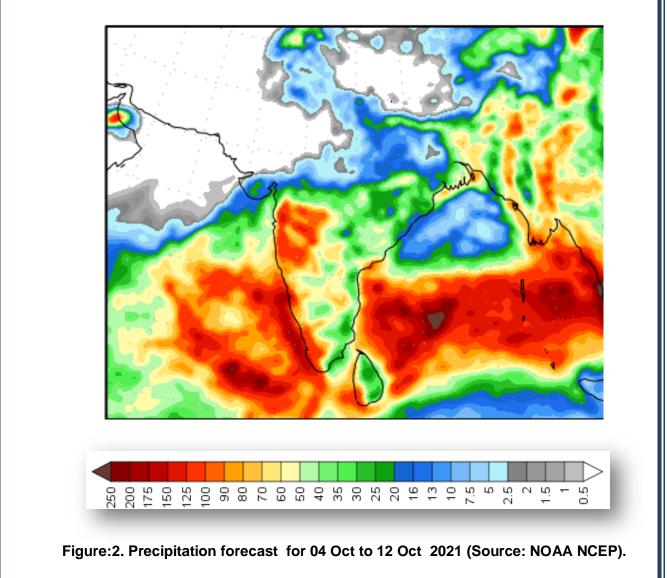


Figure: 1. Latest available satellite picture as on 04 Oct 2021 at 1356 Hrs (IST). (Source: IMD).



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