





## Agromet Advisory Bulletin for Rangpur District

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| <p><b>Agro-Meteorological Information Systems Development Project</b><br/> <b>Component-C of BWCSR</b><br/> <b>Department of Agricultural Extension</b></p> |   |   |
| <b>Date: 5th July 2020 Bulletin No. 160</b>   | <b>Agromet Advisory Bulletin for Rangpur District (05th July to 09th July 2020)</b> |   |

### Weather Conditions for last four days (01st July to 04th July 2020)

| Weather Parameters        | 01.07.20             | 02.07.20             | 03.07.20             | 04.07.20             | Range                |
|---------------------------|----------------------|----------------------|----------------------|----------------------|----------------------|
| Rainfall (mm)             | 8.0                  | 56.0                 | 20.0                 | 6.0                  | 6.0-56.0 (90.0)      |
| Maximum Temperature (° C) | 28.0                 | 30.3                 | 30.3                 | 33.0                 | 28.0-33.0            |
| Minimum Temperature (° C) | 26.6                 | 26.5                 | 25.2                 | 25.7                 | 25.2-26.6            |
| Relative Humidity (%)     | 67.0-94.0            | 92.0-98.0            | 78.0-96.0            | 70.0-95.0            | 67-98                |
| Wind Speed (km/h)         | 0.0                  | 1.9                  | 3.7                  | 3.7                  | 0.0-3.7              |
| Cloud Amount (Okta)       | 8                    | 8                    | 6                    | 6                    | 6-8                  |
| Wind Direction            | South/South-westerly | South/South-westerly | South/South-westerly | South/South-westerly | South/South-westerly |

### Weather forecast as per Bangladesh Meteorological Department for the next 5 days (05th July to 09th July 2020)

| Weather Parameters        | Range                |
|---------------------------|----------------------|
| Rainfall (mm)             | 0.0-73.7 (115.3)     |
| Maximum Temperature (° C) | 33.1-34.5            |
| Minimum Temperature (° C) | 26.7-27.3            |
| Relative Humidity (%)     | 70.0-93.0            |
| Wind Speed (Km/h)         | 3.3-4.6              |
| Cloud status              | Partly Cloudy Sky    |
| Wind Direction            | South/South-westerly |

## **Agromet Advisories**

### **Special Agromet Advisories for CORONA virus (COVID-19) transmission in Bangladesh**

Farmers and all other farm managements are advised to maintain the social distancing (at least 3 meters), cover their faces with masks and follow other guidelines of Government of Bangladesh to avoid infection and social transmission of CORONA virus (COVID-19).

### **Salient Weather Conditions & Forecast**

The axis of monsoon trough runs through Rajasthan, Uttar Pradesh, Bihar, Gangetic West Bengal and thence north-eastwards to Assam across central part of Bangladesh. One of its associated troughs extends up to North Bay. Monsoon is fairly active over Bangladesh and moderate over North Bay. As per the weather forecast received from the Bangladesh Meteorological Department (BMD) during next 24 hours, light to moderate rain/thunder showers accompanied by temporary gusty wind is likely to occur at most places over the district with moderately heavy to heavy falls at isolated places over the district. Day and night temperature may fall slightly over the country. The district received total 84.0 mm rainfall during last four days and during next 5 days total 115.3 mm rainfall is likely. Under this condition, following special advisories are issued.

### **Aus Paddy**

#### **Panicle Initiation to Harvesting**

- Harvest the matured crop on non rainy days.
- Maintain in 3-4inches water level. Maintain 5-7 water level fromt panicle initiation stage. Maintain 2-3 cm water level at grain hardening stage.
- Inspect & monitor disease-pest e.g blast, rice bug, stem borers, Gandhi bug and others and take appropriate plant protection measures
- If the population of Thrips and Green Leaf Hopper exceeds 25%, apply Malathion group insecticide at the rate of 1ml/1 litre of water.
- There is chance of Gandhi bug and Brown plant hopper attack. For Gandhi bug spray Carbaryl 50 WP@2g/liter of water. Avoid excess irrigation in the field otherwise base will be rotten. Where early transplanted paddy found 80% maturity, harvest and transfer it to safe place immediately. Spray Buprofezin 25% SC@106ml/bigha for BPH attack. Maintain proper distance within the farmers during spraying.
- Drain out water from crop field 15 days before harvesting.
- Due to large diurnal temperature, there is chance of blast disease. If noticed, adopt appropriate plant protection measures.
- Arrange proper solarisation within the row by stirring the plants after each 2 rows.
- Spraying should be done during afternoon hours or at morning hours from 10:00 a.m. to 11:00a.m
- As boro cultivation is going on full swing, it is advised to monitor the incidences of other pests and diseases and take appropriate plant protection measures as advised by the upazila Agriculture Office or Sub-Assistant Agriculture Officer.
- All the plant protection measures should be taken up after the current spell of rainfall.

### **Aman Paddy**

- Complete the sowing operations of aman paddy as soon as possible. Ensure weed free seed bed.
- Farmers may start the preparation of main land for transplanting as sufficient rainfall has been received.
- At the last stage of land preparation of field for transplanting of Aman paddy, apply per hectare 90 kg TSP, 70 kg MOP, 11 kg Zinc, and 60 kg gypsum.
- Transplanting of 25-30 days old nursery in the main after getting sufficient rainfall.
- Avoid deep planting for better crop establishment and fill up the gaps within a week. Maintain 5-7 cm standing water up to maximum tillering stage. Keep the rice nursery and field bunds free from weeds either by hand weeding or by application of herbicide. Apply recommended herbicide as per recommendation within 1-3 days of transplanting.
- Under congenial condition, following aman variety may be sown BRR1 DHAN 30, BRR1 DHAN 32, BRR1 DHAN 39, BRR1 DHAN 49, BRR1 DHAN 62 BRR1 DHAN 71, BRR1 DHAN 72, BRR1 DHAN 75, BRR1 DHAN 80, BRR1 DHAN 87, BRR1 DHAN 90, BRR1 DHAN 93, BRR1 DHAN 94, BRR1 DHAN 95, BINA DHAN 11, BINA DHAN 16, BINA DHAN 22.

### **Maize: (Kharif 1)**

- This is the time when comb matures.
- When 70-80% of maize combs become straw color and leaves are yellowish colour, then harvest the combs in sunny weather.
- Dry the harvested combs in house corridor and hang on bamboo in home yard as well.
- At the time of grain filling and maturity stage birds damage the maize cobs. Hence, set up a scarecrow dressed in light flowing clothes that may help in avoiding birds attack in maize crop. Also attach strips of aluminum foil to the scarecrow to increase the reflection of sunlight so as to restrict the bird infestation
- To control Fall of Army worm in maize, manual destruction of egg masses and caterpillars may be done. Pheromone traps @ 4/ha for monitoring and 10/ ha for mass trapping of adult insects may be done. Spray Emamectin Benzoate 5% SG @6/15 litre water if infestation is above ETL.
- All the plant protection measure should be taken after the current spell of rainfall.

### **Vegetables**

- Drain out excess water.
- Make arrangement to avoid plant damage (particularly staked creeper) from anticipated gusty winds. Make arrangement to raise new orchard during monsoon season.
- If seedlings of brinjal are ready for transplanting, transplant the seedlings on ridges and furrow with spacing of 60 x 60 cm. Sowing of kharif vegetables such as lady's finger, pumpkin, cucumber, sponge gourd, bottle gourd.
- In pumpkin, ridge-gourd, pointed gourd and cucumber, there is a chance of attack of Red-Pumpkin Beetle during current weather condition. To control, apply Dimecron or rogor (1ml per litre of water).
- The prevailing weather conditions are congenial for incidence sucking pests in vegetables. To control, spray Dimethoate @ 2 ml or Acephate @ 1.5 g per litre of water. Undertake nursery sowing of Tomato, Brinjal and Chillies and direct sowing of Gourds, Beans and Bhendi with assured irrigation.

- All the plant protection measure should be taken after the current spell of rainfall.

#### **Horticultural crops**

- Farmers are advised to go for inter cultural operations in mango orchard.
- The farmers are advised to take up plant protection measures carefully in horticultural crops like, pomegranate for bacterial blight and lime for leaf minor.
- For the orchards of the guava, add 20-25 kg cow dung and 50 gms of heptachlor in the soil extracted from the pit and fill it again. For mango, amla and berry orchards add 30 kg of cow dung, 250 grams of single super phosphate and 50-100 g heptachlor in the soil extracted from the pit and fill it again. These operations may be done.
- Farmers are advised to start digging of pit of appropriate size and distance for new orchard establishment. Prepare pit for plantation of saplings of mango, guava and coconut as sufficient rainfall has been received.
- Plantation of banana crop should be done after getting sufficient amount of rainfall. Intercultural operation should be done in banana orchard.
- Provide mechanical support to banana, to prevent the crops from lodging due to strong winds.
- Due to monsoon showers, there is a chance of Sigatoka disease in banana. As a precaution, spray Pseudomonas 20g/litre. In case of severe attack, spray 2 ml hexaconazole or 1 ml propiconazole per one litre of water by mixing it with a sticker and spray on both the surface of the leaf.

#### **Jute:**

- Foot rot, stem rot, and others diseases-pests may be infested and so has inspect the field regularly.
- Keep the jute land weed free by weeding and uproot comparatively under growth plant during the time.
- To protect capsularis jute crop (>4 ft tall) from lodging due high wind speed, the peripheral jute plants (round the field) need to be tied together by taking 4-5 jute plants in a consecutive manner.
- Harvesting and retting of jute may be done preferably at pre-flowering stage (120 days after sowing) to get better quality fibre. At present the water temperature in the retting tanks/ nalas may ideal for retting of jute. Early and timely sown capsularis jute may be harvested during this week and kept in the field in standing position for 3-4 days before retting for proper defoliation.
- Prevailing weather conditions are favourable for incidences of Hairy Caterpillar & Semiloper in Jute. Monitor the incidences of these pests. If observed, apply Spray Imidocholoprid/Chlorocyryn/ Nitro @ 1ml/litre of water for Hairy Caterpillar & Imidocholoprid/Chlorocyryn/ Nitro @ 1ml/litre of water for Semiloper.
- There may be incidences of stem weevil in jute. To control, apply Dichlorvos @ 3 ml per 4 litre of water or Endosulphan 2 ml per litre of water.

#### **Betel vine:**

- During the month, new beetle vine cultivation will start.
- Select disease free 2-3 noded tender shoot (by treated with any fungicide @ 2-3gm/L of water before transplanting) and transplant 12-15 inches X 20-30 inches (cutting to cutting X row to row) on well ploughed land.

- Strengthen the fencing of boundary of betel vine so that the boundary cannot be broken due to strong wind and thunderstorm.
- At Leaf growing stage the fencing and structure of betel vine garden broken due to “strong wind. Repair the structure as early as possible and if required took down the creeper from the structure.
- Wet the plant and the base soil with copper oxychloride solution --Spray 1% Bordeaux mixture at the base.
- Intercultural operations need to continue as others month.
- Hail storm and western storm may be possible at this time, so special care should be given for beetle leaves
- All the plant protection measures should be taken up after the current spell of rainfall.

### **Sugarcane-**

- During the month, sugarcane plant. in grand growth stage
- Cultivated summer pulse crops, leafy vegetables need to be harvested in the sugarcane field as relay/inters cropping.
- In this time, stem rot and stem borer and others disease-pest may infest the crop and so inspect the land regularly and take appropriate plant protection measure.
- All the plant protection measures should be taken up after the current spell of rainfall.

### **Livestock**

- Keep animals indoor during heavy rainfall. For cow and buffalo HS and BS vaccine should be given. During Monsoon keep chicks & birds in a relatively warmer places or use electrical bulbs.
- Immunize the farm cattle against FMD (Foot & Mouth Disease), HS (Hemorrhagic Septicemia) and BQ (Black Quarter) diseases after consultation with local veterinary doctor.

### **Poultry**

- For all age groups of poultry birds including local, broiler and layers give one dose of vaccine against Newcastle/Raniket disease in drinking water (Lasota/ F-1vaccine). Maintain free circulation of Air in poultry shed.

### **Fishery**

- Repair damaged dykes of fisheries ponds and take care so that fishes do not escape. Maintain outlet pipe from the pond so that excess water pass away and the water level is maintaining.
- Fish grower framers are advised to collect the healthy fingerlings from the authentic sources as there is enough water in the fish pond.
- Remove the unwanted fishes and predator by repeated netting before leaving the new fingerling in the fish pond.
- This is time for release of new batches of fishes in fish ponds.
- Select healthy, diseases free breeds of fishes from authentic sources after consulting with fishery officials. Before releasing, the fingerlings should be treated with Potassium permanganate (@ 3-5%.