

Agromet Advisory Bulletin for Bandarban District

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| <p>Agro-Meteorological Information Systems Development Project Component-C of BWCSR Department of Agricultural Extension</p> | | |
| Date: 20th September 2020 Bulletin No. 182 | Agromet Advisory Bulletin for Bandarban District (20th September to 24th September 2020) | |

Weather Conditions for last four days (16th September to 19th September 2020)

| Weather Parameters | 16.09.20 | 17.09.20 | 18.09.20 | 19.09.20 | Range |
|----------------------------------|----------------------|----------------------|----------------------|----------------------|----------------------|
| Rainfall (mm) | Trace | Trace | 0.0 | 15.0 | 0.0-15.0 (15.0) |
| Maximum Temperature (° C) | 33.5 | 33.8 | 33.8 | 35.1 | 33.5-35.1 |
| Minimum Temperature (° C) | 24.5 | 26.5 | 26.5 | 26.5 | 24.5-26.5 |
| Relative Humidity (%) | 69.0-93.0 | 65.0-95.0 | 64.0-93.0 | 62.0-93.0 | 62-95 |
| Wind Speed (km/h) | 14.8 | 3.7 | 5.6 | 14.8 | 3.7-14.8 |
| Cloud Amount (Okta) | 7 | 4 | 5 | 5 | 4-7 |
| 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 (20th September to 24th September 2020)

| Weather Parameters | Range |
|----------------------------------|----------------------|
| Rainfall (mm) | 0.0-29.8 (42.0) |
| Maximum Temperature (° C) | 30.3-33.9 |
| Minimum Temperature (° C) | 24.6-25.3 |
| Relative Humidity (%) | 65.0-95.0 |
| Wind Speed (Km/h) | 2.5-7.1 |
| 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 follow the guidelines of Government of Bangladesh to avoid infection and social transmission of CORONA virus (COVID-19). Precautions and safety measures should be taken up to prevent the Carona virus spread. Simple measures include social distancing, maintaining personal hygiene by washing hands with soap, wearing of face mask, drink hot water, stay at home and cleaning of implements and machinery. Farmers should not work in a group; consult with a doctor in case of any symptom. Please stay at home does not visit the field until it is very necessary.

Salient Weather Conditions & Forecast

A low pressure area has formed over Northeast Bay and adjoining area. It is likely to intensify and move in a west-northwesterly direction. The axis of monsoon trough runs through Rajasthan, Uttar Pradesh, Bihar, West Bengal to Assam across Central part of Bangladesh. Monsoon is active over southern part of Bangladesh, fairly active elsewhere over the country and moderate to strong 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 many places over the district with moderately heavy to very heavy falls at places over the district. Day temperature may fall by (1-3)° C and night temperature may fall slightly over the district. As per the outlook issued by BMD for next 72 hours, rainfall activity may increase. During last four days, no rainfall occurred and as per the quantitative medium range weather forecast, trace to moderately heavy rainfall is likely during next five days. Detail Agromet advisories are given below.

Aus Paddy

Soft Dough to Harvesting stages

- If excess water is there then immediate drain out the excess water by cutting the bund. This will help in good aeration which will reduce the incidence of pest and disease.
- Maintain 2-5 cm water level from soft dough to hard dough stage
- Maintain 2-3 cm water level at grain hardening stage.
- To control infestation of leaf blast & leaf spot in Aus rice, spray Carbendazim @2g/litre of water.
- To control of insects like steam borer gall midge and white & brown hopper apply Corbofuron 3 G@33 kg or phorat 10G @ 10 kg per /hectare and for cut worm Clorpyrifos or Daiclorovash.
- Since cloudy weather is prevailed, there is a chance of leaf folder attack in Paddy. It can be controlled by using Trichogramma cards.
- To save the rice crop from sheath blight, keep the bunds of the field clean by removing grasses.
- 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.
- Harvest the matured crop in sunny weather while 80% rice ripen.

- Harvest and dry well the grains in sunny weather (12% moisture contain e.g teeth testing) and keep it shady condition for cooling and finally store it air tight container.
- All the plant protection measure should be taken after the current spell of rainfall.

Aman Paddy

Tillering to Panicle Initial stages

- If excess water is there then immediate drain out the excess water by cutting the bund. This will help in good aeration which will reduce the incidence of pest and disease.
- Maintain 5-7 cm standing water up to maximum tillering stage.
- Second weeding should be done 30-35 days after transplanting. Weeding may be done either by hand or using weedicides. 2-4 D Amine or Butachlor may be used for weeding.
- Taking the advantage of the presence of sufficient amount of soil moisture, apply 1/3rd nitrogen as top dressing 15-20 days after transplanting. Last 1/3 nitrogen as top dressing should be applied 5-7 days before panicle initiation. Before the top-dress of Nitrogenous fertilizer in the field farmers are advised to weeding their rice plot by manually or using herbicide
- Due to substantial decrease in sunshine hours with occasional rain there is chance of attack of Yellow stem borer in Aman rice; to manage the attack, spray Carbofuran @10kg per ha.
- Where luxurious growth of plants, at tillering stage, is found ,there is chance of sheath blight attack may take place due humid weather and water stagnation. Spray Hexaconazol @ 1ml//litre water, or Tebuconazol @ 1ml/litre water. Regular inspection should be continued for disease attack observation
- There is chance of attack of leaf folder /rice hispa in seedling and tillering stage. If there is one damage leaf per hill due to attack of leaf folder or appearance of one adult hispa per hill is observed, the farmers are advised to spray Chloropyriphos 20EC or Monocrotophos 40EC @ 1.5ml per litre of water.
- • Due to persistence of high humidity and cloudy weather. false smut may appear in rice, spray with Kocide 46 DF (Chopper hydroxide) @ 500 g in 200 litres of water per acre to control false smut and after 10 days of its application spray Tilt 200 ml in 200 litres of water.
- For control of wilting, after drain out of water spray Streptocyclene and additional potasic fertilizer to the plants
- Where tillers were affected due to water stagnation, apply urea and potash fertilizer through puddling with the remaining plants for removing the gas inside the soil otherwise plants will turn reddish
- Where Tillering is complete and panicle has started, apply one hand weeding inside the field and also in the bund area, to make ensure proper solarisation inside the row.
- The maximum water utilization for rice crop is in panicle initiation stage (amount 25% of total water requirement of crop.) Due to shortage of water crop production is severely affected. Therefore farmers are advised to go for impounding field with 5-7 cm. water.
- Where Tillering is complete and panicle has started there is chance of attack of leaf roller
- Spray Malathion @ 2ml. per litre water or Chlorpyriphos@2ml/liter of water or Endosulfun@1.5ml/liter of water.
- Light trap should be used for control of insects. Light trap should be placed at some distance from the crop and bulb should be lightened from evening 06.30 PM to 10.30 PM and collected insects should be destroyed in the morning hours.
- All the plant protection measure should be taken after the current spell of rainfall.

Vegetables

- Drain out excess water.
- There is chance of Phomopsis disease in Brinjal, Spray Bavistin @ 1g/liter of water
- Off season vegetable cultivation is always profitable and challenging. These crops are very much moisture sensitive, both moisture stress and surplus will have impact on production. The land free from water logging and well drained may be selected for cultivation of Cole crops such as Cabbage, Cauliflower, etc.
- Maintain good drainage in vegetable field. Due to attack of shoot and fruit borer in brinjal, withering of terminal shoots, drooping of leaves and shedding of flower buds may be observed. To manage the pest, remove the affected terminal shoot showing bore holes and the affected fruits. To manage this insect, pheromone trap having Leucin Lure may be installed. Chemical control may be adopted if there is 4% withering of terminal shoot or 14% fruits infested with borers. For chemical control spray Spinosad 45 % SC or Emamectin Benzoate 5% SG @ 25 to 30 ml/kani twice at 15-days interval
- In Ladies finger, there is chance of Fruit borer/ Collect and destroy the affected fruits. Spray Neem oil @ 50ml/l at clear weather condition.
- 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.
- Plantation of banana crop should be done.
- Intercultural operation should be done in banana orchard.
- Ensure to harvest the mature banana at proper stage.
- 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.
- Besides, control Banana beetle, panama and others diseases-pests including continue intercultural operations and also inspect the field regularly
- Besides, to control Banana beetle, panama and others diseases-pests including continue intercultural operations it is advised to inspect the field regularly.
- Attack of Papaya mealy bug on papaya fruit can be controlled by dusting of Chlorpyrifos 1.5% dust or Malathion 5% dust around the healthy plants; also destruct ant colonies with drenching of Chlorpyrifos 20 EC @ 2 ml/litre.

Beetle vine:

- In this time and under the prevailing weather, foot rot and stem rot diseases affected plants start to die. So, affected plants and its branches have to deposit in particular hole or burning and never deposit beetle vine waste in irrigated water sources like channel /pond. Otherwise, unaffected vine land will be contaminated. In this case, all vine growers collectively have to take

this initiative (deposit all vine waste in particular hole away from the vine growing area) and as a result all vine land will be disease free condition.

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

Cotton

- Complete seed sowing at tith conditioned land considering seed rate 2 kg/33 decimal.
- Maintain row to row distance 25-35 inches and seed to seed distance 10-15 inches.
- High yielding varieties like CB-12, DM-2, Rupali and Suvro may be chosen for sowing.

Livestock

- It is very important to provide a particular amount of dewormers for both roundworm and tapeworm to any cattle, goats,
- Vaccinate the livestock for Black Quarter and foot and mouth diseases.
- Consented feed has to keep airtight condition and above the ground for avoiding fungal infestation
- Livestock may be affected by foot and mouth disease due to rainy weather. Following measures may be taken up.
- Feed them only dry food
- Keep the shed clean and dry
- If wound found at foot and mouth wash the wound with potassium per manganate solution.
- For control of biting fly, hang the alovera plant in the animal shed.
- If any malady symptom is shown in the animal then immediately consult with the veterinary doctor for proper treatments.
- Feed the milk bearing cow boiled broad leaf fodder for better milk production for indigenous cow for preventing worm infection.
- Always allow them to graze in dry land area.

Poultry

- There is chance of fungal attack due to high humidity, keep the poultry house dry and clean and apply lime with litter
- In poultry farms, appropriate space should be kept @ 1 sq. ft. per broiler and 2-2.5 sq. ft./ layer.
- Never allow chickens or ducks to eat wet or damp feed during this rainy season. It is very important to provide a particular amount of dewormers for both roundworm and tapeworm to poultry at this time.
- Apply lime bleaching powder and copper sulphet solution spray before placing them in farm
- Follow proper vaccination at proper interval
- Apply dry food and clean tap water for drinking purpose.
- For breathing problem in hen, give multivitamin syrup @ 200 to 250 ml / 50 liters of water for 200 to 300 hens or Enflox vet BC @ 0.5 ml/lit. water for 2 to 3 days.
- There is chance of Raniket, gumbra diseases in poultry; provide antibiotic drugs through water or through feed. Protect the birds from wet weather and wet floor.
- Spray water on poultry shade during hot weather condition. Viral ganboro disease infection may be high due to high temperature and humidity. Early cautionary and vaccination are prevented measures.

Fishery

- Apply lime for cleaning the water.
- Sufficient water accumulated in the pond. Start new stocking of quality fingerlings/ yearlings. Feeding may be done properly with quality and floating feed containing 20 percent crude protein. There is chance of oxygen deficiency due to increase in temperature. To maintain the dissolve oxygen regular aeration may be done using hand or bamboo splashing or using mechanical aerator
- To avoid insect infestation in nursery ponds, apply soap oil emulsion (a mixture of cheap soap @ 2.5 kg and kerosene oil @ 13 litter per bigha of pond) and apply gently in nursery ponds
- Remove the unwanted fishes and predator by repeated netting before leaving the new fingerling in the fish pond.
- 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%.
- To keep in touch with local fisheries office for more information.