Weather Summary 20th Aug to 25th Aug, 2020
In last week rain and thunderstorm occurred at many to most places over the state. Maximum and Minimum temperatures were normal.

STATE RAINFALL FORECAST (FOR THE NEXT 72 HRS.)
(VALID TILL 08:30 IST of the next day)

<table>
<thead>
<tr>
<th>Date</th>
<th>Plains/Low Hills</th>
<th>Middle Hills</th>
<th>High Hills</th>
</tr>
</thead>
<tbody>
<tr>
<td>Today</td>
<td>Rain/thundershowers at many places</td>
<td>Rain/thundershowers at many places</td>
<td>Rain/snow at few places</td>
</tr>
<tr>
<td>26th Aug, 2020</td>
<td>Rain/thundershowers at most places</td>
<td>Rain/thundershowers at most places</td>
<td>Rain/snow at few places</td>
</tr>
<tr>
<td>27th Aug, 2020</td>
<td>Rain/thundershowers at most places</td>
<td>Rain/thundershowers at most places</td>
<td>Rain/snow at few places</td>
</tr>
</tbody>
</table>

Outlook for next 4 days (up to 0830 hrs. of 31st Aug, 2020)
Rain and thunderstorm may occur at many places in low and mid hills and at few places in high hills of the state on 28th Aug and rain and thunderstorm may occur at few places in low and mid hills and at isolated places in high hills of the state till 31st Aug.

Warning: Heavy Rain at isolated places in low and mid hills on 25th, 27th, and 28th Aug. and Heavy to very heavy Rain at isolated places in low and mid hills on 26th Aug.

Rainfall forecast for the next five day 26th Aug, to 30th Aug, 2020
Agriculture and Horticulture related Advisory:-

Fruit Crop:-

- Keep the basins of the plants free from weeds and well drained.
- The new growth appearing below bud union may be cut.
- For control citrus canker, spray recommended chemicals.
- The ensuing weather is conducive for the attack of leaf minor in new growth of citrus.
- For its control, spray recommended chemicals.
- The new growth appearing below bud union may be cut.
- Monitor pomegranate butterfly and fruit borer in pomegranate and lychee.
- Keep an eye on the mealy bug pest.
- If a termite outbreak appears on the trees, sprinkle recommended chemicals.
- Ensure moisture in litchi basin or apply mulch to ensure moisture to avoid the fruits cracks in Litchi.
- In litchi fruit borer is expected in such weather for control spray recommended chemicals.
- Ensure moisture in litchi basin or apply mulch to ensure moisture to avoid the fruits cracks in Litchi.
- The ensuing weather is conducive for the attack of leaf minor in new growth of citrus.
- Farmers are advised to make a layer of grass mulching of six inch thickness in the basins of temperate fruits.
- **Apple, Pear & other temperate fruit** in the lower areas where the half dose of Nitrogen not applied earlier farmers are advised to apply this dose within 15 days of fruit settings.
- **In Mid Hills:**
  - Fruit Crop:- Litchi Stage: Flowering/ Fruit setting Breaking of one third terminal part of the branches of litchi to improve growth of new shoots and higher yield in the next season.
  - After breaking of shoots, foliar spray of 0.5 per cent ZnSO₄ should be applied.
  - Right time for plantation of evergreen fruit plants.
  - Half dose of nutrients should be applied to the evergreen fruit plants like Mango, Citrus and Litchi.
  - When weather becomes clear & dry farmers are advised to control the scab in apple farmers are advised to do the spray of Propinab (600 g) @ 200 ltr of water.
  - To control the pre mature leaf fall and alternaria blight apply Metiram 55% + Pyraclostrobin 5% WG (200g) @ 200 ltr of water.
  - In temperate fruit nursery plants operation of single stemming, removal of weeds and application of irrigation at alternate days.
  - To conserve the soil moisture farmers are advised to do 10-15 cm thick mulching of dry grass after applying Nitrogen fertilizers in the basins.
  - Be careful the green grass, rotten grass not to be used for this mulching.
- **In High hills:**
- **Apple (Stage –Fruit Development Walnut Size)**
  - Woolly aphid in apple tree use chlorpyriphos 400 ml / 200 lts of water.
  - Keep the apple beds weedless and continue with irrigation.
  - Micronutrient spray should be done.
  - Spray Fenazaquin 50 ml or Propargite 200 ml in 200litre of water for Mites in apple.
Cereal crops:

In view of threat of COVID-19 spread farmers are advised to follow the government guidelines, personal hygiene, use mask, ensure hand washing with soap at reasonable interval, social distancing during harvesting and other agricultural operation in all crops

Summer/Kharif Crops:-

- Monitoring paddy against attack of blast and brown spot is advised.
- Spraying of recommended chemicals is advised. Sometimes, in the paddy nursery, if upper leaves of the paddy seedlings become yellow and lower leaves remain green, it indicates the iron deficiency.
- Spraying of ferrous sulphate @ 0.5% with 0.25% lime solution is recommended to overcome this problem.
- Rice hispa is expected in rice fields, for management clear the grasses from bunds or Spraying of recommended chemicals is advised.
- Rice leaf folder is also appearing for control spraying of recommended chemicals is advised.
- 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.
- In Maize, stalk rot is expected in this weather for control drench maize fields with recommended chemicals a week before tasseling.
- In Maize stem borer is expected, for control put recommended granules.
- At places where maize crop is 2 or 3 weeks old, it is time for weeding.
- Hoeing and weeding should be done in all kharif crops, it improves the root growth and save the water consumption.
- Farmers are also advised to increase the amount of potash it helps in minimizing the losses due to the moisture stress.
- In rain fed areas, use of mulches is beneficial for conservation of moisture in the soil.
- **The crop planted earlier in high hilly region**, intercultural operations and urea dose advised.
- Advised to complete sowing of Clover and fescue grass.
- In high hilly intercultural operations and urea dose to peas, turnip, carrot, palak etc advised.
- In view of the rain, the farmer should prepare field bunds which should be high.
- Advised to add FYM, compost (manure compost, compost) to increase the water holding capacity and nutrients.
- **Pulses**: Ensure drainage in fields and weed free.
- Hairy caterpillar is also appearing in mash and til crops for control spray recommended chemicals.
- Use approved fungicides to prevent seed borne diseases in the monsoon crop.
- Ensure drainage in fields and weed free.
- Hairy caterpillar is also appearing in mash and til crops for control spray recommended chemicals.
**Stored Grains:**
- Weather is conducive for attack of stored grains pests like rice weevil, lesser grain borer and rice moth.
- In Grain store bins put one pouch of celhpos (3g) or quickphos (12g) or Fumino pouch in a wet cloth in the middle of bin and keep the bin airtight for some time.
- Keep the grain storage air sealed Tuber moth affected potato should not be stored but should be buried in the pits outside the fields.

**Fodder Crops:**
- Advised to sowing of fodder maize alongwith cowpeas and soybean in irrigated areas.
  - Chari bajra for fodder sowing may be completed.
- In mid hill region root slips of setaria, hathi grass may be planted in grasslands

**Vegetable:**
- **Cucurbit and ladyfinger**:
  - The creepers should be lifted above the ground on a trellis made of bamboo.
  - Attack of fruit fly expected in this weather in cucurbitaceous crops use of ‘Methyl Eugenol’ trap is advised.
  - For control recommended chemical is advised after clear sky.
  - In cucurbitaceous crop attack of mite and jassid is expected.
  - In cucurbits crops, attack of red beetle insect expected in the cucurbitaceous vegetables, if the number of pest is high then spraying of recommended chemicals advised.
  - In case of severe problem of cutworms in vegetable crops, apply chlorpyriphos 20 EC @ 2 litres of water mixed with 25 kg sand per hectare
  - Trap can be used for fruit fly in cucurbitaceous vegetables.
  - Farmers can use methyl eugenol trap to monitor fruit fly in pumpkin vegetables.
  - On the symptoms spray of recommended chemical with water when the sky is clear advised
  - **In mid hill region nursery** sowing of Chinese cabbage and direct sowing of raddish, carrot, broccoli, lettuce and red is advised
  - **In high hills regions** : The crops planted earlier, in high hilly region, intercultural operations and urea dose advised. In high hilly intercultural operations and urea dose to peas, turnip, carrot, palag etc advised

**Bhindi ,French bean and Pea**
- After harvesting of mature lady finger application of urea @ 5-10 kg/acre and thereafter application of light irrigation is advised.
- In sub tropical climate mite and jassid are expected in lady chilli and cucurbitaceous, for control spraying of recommended chemicals is advised to control mite and spraying of recommended chemicals is advised against jassid, when sky is clear
- Advised intercultural of bhindi and French bean in the field.
- Installation of bird perches in tomato, pea, brinjal and gram crops 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.
- Constant monitoring of the chilli crop against attack of mites and jassid is advised.
- In High hills regions sowing of peas, French bean and Ogla and phafra can be done. Weeding advised in the crop sown earlier.
- In high hilly intercultural operations and urea dose to peas, turnip, carrot, palak etc advised

**Tomato, chilli, capsicum and brinjal**

- In vegetables (brinjal, cauliflower, cabbage, tomato etc), for monitoring of borer insect, farmers are advised to use pheromone trap @ 3-4/acre.
- Shoot and fruit borer in brinjal and tomato crops expected, infested fruits and shoots should be collected and buried inside the soil.
- Installation of bird perches in tomato, pea, brinjal and gram crops is advised to control fruit borer insect. Constant monitoring of the chilli crop against attack of mites and jassid is advised.
- Shoot and fruit borer in brinjal and tomato crops expected, infested fruits and shoots should be collected and buried inside the soil.
- Constant monitoring of the chilli crop against attack of mites is advised.

**Radish and turnip, onion, turmeric and ginger**

- Thrips attack in onion sown earlier is expected for control spraying of recommended chemicals should be done when sky remains clear.
- For control of powdery mildew in peas, spray recommended chemicals.
- Apply mulch and well rotten FYM on these crops.
- Advised to give light irrigation in the mature onion and garlic crops one week before digging.

**Potato:**

- In mid hills harvesting advised.
- Potato tuber moth affected tuber should not be stored with other tubers.
- Make one layer of 2 cm of neela phuluni / lal phuluni dried leaves powder or dry sand for storage potato.
- **In High Hills:** According to the size of the seed sowing should be done in 20-25 cm of spacing.
- Remove the weeds from the fields and apply irrigation as required.
- To get good germination and adequate yield each potato should have 2-3 eyes.
- For the cutworms in Potato do drenching of chloropyrifos 20 EC 3ml/litre of water.

**Water Management:**

- Mulch material may also be arranged to use during dry spell.
- In rain fed areas, use of mulches is beneficial for conservation of moisture in the soil.
- Make proper bunds for water conservation in the rice field.
Poly House Agriculture:

- Keep the open top and side bent on clear day and close on rainy day.
- For control of Powdery mildew, Aphids and spodopetra spray recommended chemicals.
- Ensure drainage near polyhouses. One week before sowing of crops, keep yellow sticky trap in polyhouse and after transplanting drench plant with spray recommended chemicals. Mites expected in polyhouse spray recommended chemical.
- Do not harvest vegetable at least for seven days of the spray.
- In Tomato and capsicum crops provide support with ropes.
- Open the side and top for temperature control.

Tea:

- Continue picking in tea at 8-10 days interval to maintain the quality and productivity.
- Lopping of shade trees advised in tea orchards.
- Plucking of tea leaves can be continued at 8-10 days interval.
- Milli bug is appearing in the orchards, for control spray recommended chemicals.
- For the control of mites spray recommended chemicals.
- Spray immediately after plucking.

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.

Mushroom Cultivation:

- Maintain room temperature 18-22°C and relative humidity around 85% for successful cultivation.
- Maintain the room temperature and humidity using proper ventilation, fans and coolers if required and foggers for sprinkling water for maintaining humidity.

Floriculture:

- Transplanting of Chrysanthemum, marigold and sowing of gladiolus should be done on raised bed.
- Blue beetle attack is seen in Balsam, Zenia, cleome and rose, for control spray cypermethrin 20 ml in 10 litres of water.
- In poly house s attack of thrips and mites is expected for control spray Rogur 20 ml in 10 litres of water for thrips and for beetle spray diclofol 20 ml in 10 litres of water.
- To control thrips in tagets spray Rogur 20 ml in 10 litres of water.
- Planting of marigold seedlings in the field should be done for seed production or late harvest.

II Livestock:
Animal Husbandry:

- Advised not to allow animals to eat lantana these days. Consult veterinary doctor for FMD Vaccination.
- Ecto-parasite attack is expected in this weather for control spray Butox @ 2ml per litre in cowshed. Give mixture of hay & green fodder.
- Ensure cleanliness in cows having advanced pregnancy to avoid mastitis.
- Monitor the animals for FMD and advised to 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 up to three months of age and then quarterly up to one year of age.
- At this time increase the quantity of wheat straw and Jowar in the feed.
- Give mixture of hay & green fodder.
- Ensure cleanliness in cows having advanced pregnancy to avoid mastitis.
- Do not over crowd the cowsheds.
- Use phenol in cow shed to avoid mosquito and insects.
- To avoid loss of essential body salts in animals ensure that a salt mixture in appropriate quantity is mixed with the feed and water and given to animals.
- Depending upon the season, the content of the animal feed should be changed.
- Ticks are found in abundant in open grazing animals and cattles. Spray Sypermethrin or Amitrar @ 1 ml / ltr of water on the body of the animal against the ticks and repeat the spray after 10-15 days.

Poultry:

- Climate is congenial for attack of Diaarhuria and cocksedia so, Consult the nearby veterinarian.
- For new lot of layers chicks follow recommended schedule of vaccination for IBD and Ranikhet disease because weather is conducive for the spread of these disease.
- 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. Protect poly house from rains showers.
- For precautionary measures spray formaline 40% @ 1 litre in 9 litres of water in outside or surrounding of farm.
- Also do not allow human and birds from outside.
- This will help in protection from bird flu. Increase protein in feed of poultry.

Apiculture:

- Examine colonies for barroa mites.
- Dust sulphur on sealed brood in the colony and not on larvae to control mites attack on honey bees.
- For protection of ants put the legs of apiary into water so that ants could not attack apiary.
- Keep the colonies in shady places if possible to reduce the heat as temperature rising high in the region.
Fisheries:

- Due to high rainfall Fish pond should be surrounded /protected with net so that the fishes may not escape outside the pond.
- Water depth of atleast 5-6 feet should be maintained in order to rear all the three types of fish viz., mirror carp, grass carp and silver carp.
- Add supplementary feed (rice/wheat bran & mustard oil cake and rice/wheat bran) @ 4-6% of total fish biomass on daily basis.
- Inely crushed boiled eggs and goat liver can be given at intervals to add to vigor.
- To protect from microbial attack so clean your raceways regularly at 15 day intervals and give regular rock salt baths to your stock.
- In the event of high temp fluctuations in lower plain areas, put 5g lime per sq ft to avoid the stress