

# STATE COMPOSITE AGRO-MET ADVISORY BULLETIN FOR THE STATE OF SIKKIM PERIOD: 19th AUGUST – 21ST AUGUST"2014



#### IMD, GANGTOK IN COLLABORATION WITH ICAR, GANGTOK, FSAD AND HCCD, GANGTOK





#### ISSUED ON TUESDAY 19th AUGUST'2014 BY

### Meteorological Sub-division of Sikkim

As per India Meteorological Department's classification, Sikkim is a part of Met Sub-Division of Sub Himalayan West Bengal & Sikkim (SHWB & SKM) and is divided into four (4) Districts:

- 1) North District with HQ at Mangan
- 2) East District with HQ at Gangtok
- 3) West District with HQ at Gyalsing
- 4) South District with HQ at Namchi

## Part I: Weather

Significant Past Weather in different districts during the period 15/8/14 TO 18/8/14

Weather Forecast for different districts for the period 19/8/14 to 24/8/14

#### **North Sikkim**

| Mangan (AWS) |               |                      |                      | North Sikkim  |  |
|--------------|---------------|----------------------|----------------------|---|--|
| Date         | Rainfall (mm) | Max.<br>Temp<br>(°C) | Min.<br>Temp<br>(°C) | Generally Cloudy or cloudy sky during the period  |  |
| 15-08-2014   | 020.0         | 23.4                 | 19.3                 | 19 <sup>th</sup> August to 24 <sup>th</sup> August is expected.  ■ Light to moderate rain is expected during the period 19 <sup>th</sup> August to 24 <sup>th</sup> August. |  |
| 16-08-2014   | 011.0         | 26.2                 | 19.7                 | <ul><li>■ Wind from southerly to southwesterly with an average speed of 2-3 km/hr is expected.</li><li>■ Maximum and minimum temperatures are</li></ul>                     |  |
| 17-08-2014   | 010.0         | 28.1                 | 19.5                 | expected to be around 27-29 °C and 20°C respectively.  Maximum and minimum relative humidity is   |  |
| 18-08-2014   | 000.0         | 28.8                 | 20.0                 | expected to be 92-96 % and 77-83 % respectively.  |  |

#### **East Sikkim**

|            | Gangt         | ok                   |                      | East Sikkim  |
|------------|---------------|----------------------|----------------------|--|
| Date       | Rainfall (mm) | Max.<br>Temp<br>(°C) | Min.<br>Temp<br>(°C) | Generally Cloudy or cloudy sky during the period 19 <sup>th</sup> August to 24 <sup>th</sup> August is expected.   |
| 15-08-2014 | 024.8         | 019.8                | 017.5                | <ul> <li>Moderate rain is expected during the period 19<sup>th</sup> August to 24<sup>th</sup> August.</li> <li>Wind from southerly to westerly with an average</li> </ul> |
| 16-08-2014 | 025.1         | 021.9                | 017.1                | speed of 1-2 km/hr is expected.  Maximum and minimum temperatures are expected to be around 21-22°C and 18°C   |
| 17-08-2014 | 032.4         | 021.2                | 017.9                | respectively.  Maximum and minimum relative humidity is expected to be 92-96 % and 75-82 %   |
| 18-08-2014 | 018.2         | 022.8                | 017.7                | respectively.  |

Significant Past Weather in different districts during the period 15/8/14 TO 18/8/14

Weather Forecast for different districts for the period 19/8/14 to 24/8/14

### **South Sikkim**

| Namthang   |               |                      |                      | South Sikkim  |  |
|------------|---------------|----------------------|----------------------|---|--|
| Date       | Rainfall (mm) | Max.<br>Temp<br>(°C) | Min.<br>Temp<br>(°C) | Generally Cloudy or cloudy sky during the period 19 <sup>th</sup> August to 24 <sup>th</sup> August is expected.  |  |
| 15-08-2014 | 022.1         | 21.8                 | 16.0                 | <ul> <li>■ Light to moderate rain is expected during the period 19<sup>th</sup> August to 24<sup>th</sup> August.</li> <li>■ Wind from southerly to westerly with an average</li> </ul> |  |
| 16-08-2014 | 007.3         | 22.5                 | 17.5                 | speed of 2-3 km/hr is expected.  Maximum and minimum temperatures are expected to be around 24-25°C and 18°C  |  |
| 17-08-2014 | 000.0         | 24.0                 | 17.0                 | respectively.  Maximum and minimum relative humidity is expected to be 94-96 % and 79-86 %  |  |
| 18-08-2014 | 001.4         | -                    | 17.8                 | respectively.   |  |

#### **West Sikkim**

| Gyalshing  |               |                      |                      | West Sikkim   |
|------------|---------------|----------------------|----------------------|---|
| Date       | Rainfall (mm) | Max.<br>Temp<br>(°C) | Min.<br>Temp<br>(°C) | Generally Cloudy or cloudy sky during the   |
| 15-08-2014 | 003.0         | 017.4                | 020.5                | period 19 <sup>th</sup> August to 24 <sup>th</sup> August is expected.  Moderate rain is expected during the period 19 <sup>th</sup> August to 24 <sup>th</sup> August.                                   |
| 16-08-2014 | 004.0         | 017.5                | 024.0                | <ul> <li>■ Wind from south-easterly to southwesterly with an average speed of 2-3 km/hr is expected.</li> <li>■ Maximum and minimum temperatures are expected to be around 24-25°C and 17-18°C</li> </ul> |
| 17-08-2014 | 002.0         | 017.5                | 025.2                | respectively.  Maximum and minimum relative humidity is expected to be 94-97 % and 82-92 %  |
| 18-08-2014 | 001.0         | 017.7                | 025.5                | respectively.   |

## Part II

#### **AGRO-METEREOLOGICAL ADVISORIES**

#### **General Advisories for all the crops**

- Proper drainage to be maintained in pulse/beans/ginger/turmeric/Dalley chilli.
- Avoid water stagnation in guava/ mandarin crop.
- ◆ Avoid top dressing of organic manure.
- Preventive spray and soil drenching with copperoxychloride@2.5 g/l of water immediate after rain subside.
- Spray sulphur powder@ 2g/l in case of powdery mildew disease.
- Avoid spraying of plant protection biopesticides during rain and morning Hours.

| Name of the crop/Animal | Stage    | Pest/ Disease              | Agro-Met Advisories  |
|-------------------------|----------|----------------------------|--|
| Crops                   |          |                            |  |
| Rice                    | Seedling | Leaf folder  Blast of rice | <ul> <li>Weeding and thinning should be done.</li> <li>Maintain 2-3 cm water in the field.</li> <li>Spray neem based formulation (1500ppm) @ 3ml per litre of water for controlling leaf folder.</li> <li>Monitor regularly and unfold the leaves folded by the leaf folder; and manually collect and destroy.</li> <li>Spray copper oxychloride @2.5 g/l for rice blast.</li> </ul> |

| Soybean                          | Flowering                | Blister beetle  Leaf roller damage                                | <ul> <li>Proper drainage should be maintained.</li> <li>Spray neem based formulation (1500ppm) @ 3ml per litre of water for controlling leaf roller.</li> <li>Monitor regularly and unfold the leaves folded by the leaf roller. Manually collect and destroy both the insects.</li> </ul>  |
|----------------------------------|--------------------------|---|---|
| Pahenlo dal /Kalo Dal (urd bean) | vegetative               |   | <ul> <li>Proper drainage should be maintained</li> <li>Weeding and thinning should be done.</li> <li>Spray neem based formulation (1500 ppm) @ 3ml per litre of water for controlling leaf feeding beetles.</li> </ul>  |
| Finger millet                    | Vegetative               |   | Transplanting and gap filling should<br>be completed as earliest. Maintain<br>optimum plant population for good<br>yield.   |
| Maize                            | Harvesting               |   | <ul> <li>Harvest mature cobs and sun dry.</li> <li>After proper drying, store grains/<br/>seeds in well ventilated godown.</li> </ul>   |
| Beans                            | Vegetative/<br>Flowering | Blister beetle may occur and destroy flowers.      Powdery mildew | <ul> <li>Handpicking is effective to control this pest.</li> <li>Collection and destruction of initial infected plant parts.</li> <li>Spray out sulphur based fungicide @ 2 g/l to control powdery mildew.</li> <li>Proper drainage should be maintained</li> <li>Seed treatment with <i>Trichoderma viride</i> culture @ 5g/kg of seed prior to re-sowing for gap filling.</li> <li>Soil drenching with copper oxychloride @2.5 g/l for damping off in infected area.</li> </ul> |

|                    |                              | Damping off                                |  |
|--------------------|------------------------------|--|--|
| Large cardamom     | Capsule<br>formation         | Infestation of shoot flies and stem borer. | <ul> <li>Collection and destruction of infested tillers. Spraying of neem formulation (1500 ppm) @ 3 ml/l.</li> <li>Keep cardamom fields weed free.</li> <li>Collection and destruction of disease infected plants/ tillers.</li> </ul>  |
| Cole crops         |                              |  | <ul> <li>Time for nursery raising of cabbage, cauliflower and broccoli under low cost structure.</li> <li>Soil drenching of nursery bed with copper oxychloride @5 g/l to prevent damping off.</li> <li>Prepare 15cm raised bed nursery of 1m width.</li> <li>Well-decomposed FYM @ 2.5 kg/sqm to be applied during nursery bed preparation.</li> </ul>                |
| Dalley Chilli      | Flowering<br>and<br>Fruiting | Fruit fly damage                           | <ul> <li>Field should be cleaned and weed free.</li> <li>Proper drainage should be maintained.</li> <li>Fallen fruits should be collected and destroyed to minimize fruit fly.</li> </ul>  |
| Sikkim<br>Mandarin | Fruit growth                 | Aphid                                      | <ul> <li>Proper drainage should be maintained.</li> <li>Basin of plants should be cleaned.</li> <li>Spray petroleum oil based agro-spray @ 10 ml/l for managing aphid, leaf miner, mealy bug etc.</li> <li>Regular monitoring and cleaning of infested trunk. Plug the holes with cotton soaked in kerosene/petrol and plaster with mixture of cow dung and</li> </ul> |

# Leaf miner

Mealy bug



Trunk borer



Scab



soil.

 Spray copper oxychloride @ 2.5 g/l to manage citrus scab.

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| Animai Scien  | ces          |                          |   |  |
|---------------|--------------|--------------------------|---|--|
| Tibetan Sheep | Full grown   | Chances of soiling and   | * | Go for shearing of you Sheep followed          |
|               | wool         | picking infection.       |   | by spraying or Dipping in ectoparasitic        |
|               |              |                          |   | solution.                                      |
| Yak, Tibetan  | High         | Favorable condition for  | * | Go for deworming with fenbedazole              |
| Sheep, Goat   | humidity and | ectoparasitic infection. |   | @10mg/kg.                                      |
| Cattle        | Moderate     |                          |   |  |
|               | temperature  |                          |   |  |
|               |              |                          |   |  |
| Cattle, Sheep | Comfortable  | Plenty of green pasture/ | * | Chances of coming into estrus so               |
| and Goat      | temperature  | fodder available in the  |   | farmers are advised to look for heat           |
|               |              | field.                   |   | sign especially during early morning           |
|               |              |                          |   | or late evening and ensure breeding of         |
|               |              |                          |   | the animal after 12 hr of 1 <sup>st</sup> heat |
|               |              |                          |   | observe.                                       |