

## STATE COMPOSITE AGRO-MET ADVISORY BULLETIN FOR THE STATE OF SIKKIM PERIOD: 29<sup>th</sup> AUGUST – 1<sup>st</sup> SEPTEMBER"2014



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





#### **ISSUED ON FRIDAY 29th 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 26/8/14 TO 28/8/14 Weather Forecast for different districts for the period 29/8/14 to 02/9/14

North Sikkim						
N	Mangan (AWS)			North Sikkim		
Date	Rainfall (mm)	Max. Temp (°C)	Min. Temp (°C)	Generally Cloudy sky during the period 29 <sup>th</sup> August to 2 <sup>nd</sup> September is expected.		
26-08-2014	029.0	26.8	19.0	<ul> <li>Moderate rain is expected during the period 29<sup>th</sup> August to 2<sup>nd</sup> September.</li> <li>Wind from south-easterly to southerly with an average speed of 2-3 km/hr is expected.</li> </ul>		
27-08-2014	017.0	27.9	19.1	Maximum and minimum temperatures are expected to be around 29-31°C and 19°C respectively.		
28-08-2014	014.0	28.9	18.4	Maximum and minimum relative humidity is expected to be 85-92 % and 70-77% respectively.		

## East Sikkim

Gangtok				East Sikkim		
Date	Rainfall (mm)	Max. Temp (°C)	Min. Temp (°C)	<ul> <li>Generally Cloudy sky during the period 29<sup>th</sup> August to 2<sup>nd</sup> September is expected.</li> </ul>		
26-08-2014	046.9	20.6	17.2	<ul> <li>Moderate rain is expected during the period 29th August to 2nd September.</li> <li>Wind from east-southeasterly to southerly with an average speed of 2-3 km/hr is</li> </ul>		
27-08-2014	048.3	21.3	17.3	<ul> <li>expected.</li> <li>Maximum and minimum temperatures are expected to be around 23-24°C and 17°C</li> </ul>		
28-08-2014	004.9	22.3	16.8	<ul> <li>respectively.</li> <li>Maximum and minimum relative humidity is expected to be 90-95% and 75-82% respectively.</li> </ul>		

Significant Past Weather in different districts during the period 26/8/14 TO 28/8/14 Weather Forecast for different districts for the period 29/8/14 to 02/9/14

South Sikkim						
Namthang				South Sikkim		
Date	Rainfall (mm)	Max. Temp (°C)	Min. Temp (°C)	Generally Cloudy sky during the period 29 <sup>th</sup> August to 2 <sup>nd</sup> September is expected.		
26-08-2014	059.6	26.5	16.2	<ul> <li>Moderate rain is expected during the period 29<sup>th</sup> August to 2<sup>nd</sup> September.</li> <li>Wind from East-southeasterly to southerly with an average speed of 1-2 km/hr is</li> </ul>		
27-08-2014	003.2	27.5	17.5	<ul> <li>expected.</li> <li>Maximum and minimum temperatures are expected to be around 26-28°C and 20°C respectively.</li> </ul>		
28-08-2014	000.0	27.0	20.0	<ul> <li>respectively.</li> <li>Maximum and minimum relative humidity is expected to be 89-94% and 71-78% respectively</li> </ul>		

### West Sikkim

Gyalshing				West Sikkim		
Date	Rainfall (mm)	Max. Temp (°C)	Min. Temp (ºC)	Generally Cloudy sky during the period 29 <sup>th</sup> August to 2 <sup>nd</sup> September is expected.		
26-08-2014	001.0	22.0	17.3	<ul> <li>Light to moderate rain is expected during the period 29<sup>th</sup> August to 2<sup>nd</sup> September.</li> <li>Wind from easterly to southeasterly with an average speed of 1-3 km/hr is expected.</li> </ul>		
27-08-2014	001.0	24.9	16.9	<ul> <li>Maximum and minimum temperatures are expected to be around 26-27°C and 17°C respectively.</li> <li>Maximum and minimum relative humidity is</li> </ul>		
28-08-2014	001.0	N/A	16.7	expected to be 86-93% and 70-80% respectively		

# <u>Part II</u>

### **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	<ul> <li>Leaf folder</li> <li>Image: Second second</li></ul>	<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	<ul> <li>Blister beetle</li> <li>Filiater beetle</li> <li>Fili</li></ul>	<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 ( <i>urd</i> 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</li> </ul>
			controlling leaf feeding beetles.
Finger millet	Vegetative		<ul> <li>Transplanting and gap filling should be completed as earliest. Maintain optimum plant population for good yield.</li> </ul>
Maize	Harvesting		<ul> <li>Harvest mature cobs and sun dry. After proper drying, store grains/ seeds in well ventilated godown.</li> </ul>
Beans	Vegetative/ Flowering	<ul> <li>Blister beetle may occur and destroy flowers.</li> <li>Second second second</li></ul>	<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>

		<ul> <li>Damping off</li> <li>Image: Display the second s</li></ul>	
Large cardamom	Capsule 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 and Fruiting	<ul> <li>Fruit fly damage</li> <li>Image: The second seco</li></ul>	<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 Mandarin	Fruit growth	<ul> <li>Aphid</li> <li>Image: Aphid</li> </ul>	<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>

		<ul> <li>k Leaf miner</li> <li>iiiiiiiiiiiiiiiiiiiiiiiiiiiiiiii</li></ul>		soil. Spray copper oxychloride @ 2.5 g/ l to manage citrus scab.
Animal Scien Tibetan Sheep	<b>Ces</b> Full grown wool	Chances of soiling and picking infection.	*	Go for shearing of you Sheep followed by spraying or Dipping in ectoparasitic
Yak, Tibetan Sheep, Goat Cattle	High humidity and Moderate temperature	Favorable condition for ectoparasitic infection.	٠	solution. Go for deworming with fenbedazole @10mg/kg.
Cattle, Sheep and Goat	Comfortable temperature	Plenty of green pasture/ fodder available in the field.	٠	Chances of coming into estrus so farmers are advised to look for heat sign especially during early morning or late evening and ensure breeding of the animal after 12 hr of 1 <sup>st</sup> heat observe.