



STATE COMPOSITE AGRO-MET ADVISORY BULLETIN FOR THE STATE OF SIKKIM PERIOD: 16TH SEPTEMBER – 18TH SEPTEMBER 2014



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



ISSUED ON TUESDAY 16TH SEPTEMBER 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 Gyalshing
- 4) South District with HQ at Namchi

Part I: Weather

Significant Past Weather in different districts during the period 12/09/14 TO 15/09/14

Weather Forecast for different districts for the period 16/09/14 to 20/09/14

North Sikkim

Mangan (AWS)				North Sikkim
Date	Rainfall (mm)	Max. Temp (°C)	Min. Temp (°C)	<ul style="list-style-type: none"> Generally cloudy sky during the period 16th September to 20th September is expected. Light to moderate rain is expected during the period 16th September to 20th September. Wind from southerly to southwesterly with an average speed of 1-3 km/hr is expected. Maximum and minimum temperatures are expected to be around 26-28°C and 19°C respectively. Maximum and minimum relative humidity is expected to be 92-97% and 74-85% respectively.
12-09-2014	005.0	25.6	18.2	
13-09-2014	036.0	25.0	18.9	
14-09-2014	033.0	24.8	18.4	
15-09-2014	000.0	24.1	19.0	

East Sikkim

Gangtok				East Sikkim
Date	Rainfall (mm)	Max. Temp (°C)	Min. Temp (°C)	<ul style="list-style-type: none"> Generally cloudy sky during the period 16th September to 20th September is expected. Light to moderate rain is expected during the period 16th September to 20th September. Wind from south-southeasterly to southwesterly with an average speed of 1-2 km/hr is expected. Maximum and minimum temperatures are expected to be around 21-22°C and 17°C respectively. Maximum and minimum relative humidity is expected to be 92-95% and 74-80% respectively.
12-09-2014	019.0	21.3	16.0	
13-09-2014	008.2	21.3	16.9	
14-09-2014	003.2	21.2	17.1	
15-09-2014	002.7	19.4	17.2	

Significant Past Weather in different districts during the period 12/09/14 TO 15/09/14

Weather Forecast for different districts for the period 16/09/14 to 20/09/14

South Sikkim

Namthang				South Sikkim
Date	Rainfall (mm)	Max. Temp (°C)	Min. Temp (°C)	<ul style="list-style-type: none"> Generally cloudy sky during the period 16th September to 20th September is expected. Light to moderate rain is expected during the period 16th September to 20th September. Wind from southeasterly to southwesterly with an average speed of 2-3 km/hr is expected. Maximum and minimum temperatures are expected to be around 27-29°C and 19°C respectively. Maximum and minimum relative humidity is expected to be 92-96% and 72-80% respectively.
12-09-2014	002.0	28.0	18.5	
13-09-2014	001.4	27.5	19.5	
14-09-2014	000.0	28.5	18.0	
15-09-2014	006.0	27.5	19.0	

West Sikkim



Gyalshing				West Sikkim
Date	Rainfall (mm)	Max. Temp (°C)	Min. Temp (°C)	<ul style="list-style-type: none"> Generally cloudy sky during the period 16th September to 20th September is expected. Light to moderate rain is expected during the period 16th September to 20th September. Wind from easterly to southerly with an average speed of 1-3 km/hr is expected. Maximum and minimum temperatures are expected to be around 23-25°C and 16°C respectively. Maximum and minimum relative humidity is expected to be 91-97% and 75-79% respectively.
12-09-2014	001.0	N/A	16.5	
13-09-2014	001.0	24.1	17.1	
14-09-2014	001.0	N/A	16.5	
15-09-2014	001.0	N/A	17.3	




Part II



AGRO-METEOREOLOGICAL ADVISORIES

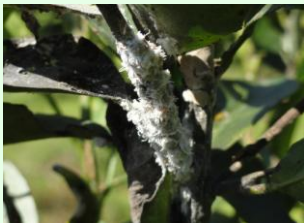


General Advisories for all the crops

- Proper drainage to be maintained in pulse/beans/ginger/turmeric/Dalley chilli.
- Avoid water stagnation in guava/ mandarin crop.
- Preventive spray and soil drenching with copperoxychloride@2.5 g/l of water at weekly intervals.
- Avoid spraying of plant protection biopesticides during rain and morning hours.
- Field preparation for early *Rabi* vegetable crops like cole crops, pea, leafy vegetables, tomato etc.
- Water harvesting and storage in various structures like *Jalkund* is recommended for cultivation of *Rabi* crops.

Name of the crop/Animal	Stage	Pest/ Disease	Agro-Met Advisories
Crops			
Rice	Maximum tillering/ booting	❖ Blast of rice  ❖ Leaf folder 	♦ Weeding should be completed. ♦ Maintain 2-3 cm water in the field. ♦ Spray copper oxychloride @2.5 g/l for rice blast. ♦ Spraying of <i>Pseudomonas fluorescens</i> @ 0.2% for management of blast and sheath blight at weekly intervals. ♦ Spray neem based formulation (1500ppm) @ 3ml per litre of water for controlling leaf folder. ♦ Monitor regularly and unfold the leaves folded by the leaf folder; and manually collect and destroy

Soybean	Pod formation/ milking stage	<ul style="list-style-type: none"> ❖ Blister beetle  <ul style="list-style-type: none"> ❖ Leaf roller damage 	<ul style="list-style-type: none"> ◆ Proper drainage should be maintained. ◆ Monitor regularly and unfold the leaves folded by the leaf roller. Manually collect and destroy both the insects. ◆ Spray wettable Sulphur @0.25% for the management of rust and powdery mildew. ◆ Spray neem based formulation (1500ppm) @ 3ml per litre of water for controlling leaf roller.
Pahenlo dal /Kalo Dal (<i>urd</i> bean)	Vegetative/ flowering		<ul style="list-style-type: none"> ◆ Proper drainage should be maintained ◆ Weeding should be done. ◆ Spray neem based formulation (1500 ppm) @ 3ml per litre of water for controlling leaf feeding beetles. ◆ Spray COC (0.25%) or Bordeaux mixture @ 1% at weekly intervals for the management of various leaf spot diseases.
Finger millet	Tillering/ flowering		<ul style="list-style-type: none"> ◆ Maintain optimum plant population for good yield. ◆ Weeding to be undertaken.
Beans	Vegetative/ Flowering	<ul style="list-style-type: none"> ❖ Blister beetle may occur and destroy flowers.  <ul style="list-style-type: none"> ❖ Powdery mildew 	<ul style="list-style-type: none"> ◆ Handpicking is effective to control this pest. ◆ Collection and destruction of initial infected plant parts. ◆ Spray out sulphur based fungicide @ 2 g/l to control powdery mildew. ◆ Proper drainage should be maintained ◆ Spray COC (0.25%) or Bordeaux mixture @ 1% at weekly intervals for the management of various leaf spot diseases.
Large cardamom	Capsule formation	<ul style="list-style-type: none"> ❖ Infestation of shoot flies and stem borer. 	<ul style="list-style-type: none"> ◆ Collection and destruction of infested tillers. Spraying of neem formulation (1500 ppm) @ 3 ml/l. ◆ Keep cardamom fields weed free. ◆ Collection and destruction of disease

			infected plants/ tillers.
Cole crops	--		<ul style="list-style-type: none"> ◆ Time for nursery raising of cabbage, cauliflower and broccoli under low cost structure. ◆ Dolomite application @ 200g/sqm for soil having pH less than 5.5. ◆ Seed treatment with <i>Trichoderma viride</i> @ 4 g/kg of seed. ◆ Soil drenching of nursery bed with copper oxychloride @2.5 g/ l or Bordeaux mixture @ 1% to prevent damping off. ◆ Soil application of <i>Trichoderma viride</i> @ 2.5 kg mixed with 50kg well decomposed FYM for 1 ha. ◆ Prepare 15cm raised bed nursery of 1m width. ◆ Well-decomposed FYM @ 2.5 kg/sqm to be applied during nursery bed preparation.
Dalley Chilli	Fruiting	❖ Fruit fly damage	<ul style="list-style-type: none"> ◆ Field should be cleaned and weed free. ◆ Proper drainage should be maintained. ◆ Fallen fruits should be collected and destroyed to minimize fruit fly.
Sikkim Mandarin	Fruit growth	❖ Aphid  ❖ Leaf miner 	<ul style="list-style-type: none"> ◆ Proper drainage should be maintained. ◆ Basin of plants should be cleaned. ◆ Spray petroleum oil based agro-spray @ 10 ml/l for managing aphid, leaf miner, mealy bug etc. ◆ Regular monitoring and cleaning of infested trunk. Plug the holes with cotton soaked in kerosene/petrol and plaster with mixture of cow dung and soil. ◆ Spray copper oxychloride @ 2.5 g/ l to manage citrus scab.

		❖ Mealy bug 	
		❖ Trunk borer 	
		❖ Scab 	

Animal Sciences

Tibetan Sheep	Full grown wool	Chances of soiling and picking infection.	◆ Go for shearing and followed by spraying or Dipping in ectoparasitic solution.
Yak, Tibetan Sheep	Breeding season	Weight gain	◆ Start observing heat sign.
Cattle, Sheep and Goat	All stages	Plenty of green pasture/ fodder available in the field.	◆ 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 st heat observe.
Poultry	All stages	High humidity	◆ Frequent raking and liming of deep litter materials.
Pig	All stages	High humidity	◆ Keep floor dry to avoid skin diseases.