



# STATE COMPOSITE AGRO-MET ADVISORY BULLETIN FOR THE STATE OF SIKKIM PERIOD: 23<sup>rd</sup> JANUARY"2015 – 26<sup>th</sup> JANUARY"2015



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



**ISSUED ON "FRIDAY 23<sup>rd</sup> JANUARY"2015**

## **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

Mangan (AWS)				North Sikkim Forecast					
				Day → Parameter ↓	Day 1	Day 2	Day 3	Day 4	Day 5
Date	Rainfall (mm)	Max. Temp (°C)	Min. Temp (°C)	Sky Condition	Generally Cloudy	Generally Cloudy	Generally Cloudy	Generally Cloudy	Generally Cloudy
				Rainfall	No rain	No rain	Very Light	Very Light	No rain
20-1-2015	000	19.2	06.1	Wind (Km/Hr) (Speed/ Dir)	2(W)	3(WSW)	3(WSW)	3(SSW)	2(SSW)
21-1-2015	000	20.3	07.2	Temperature (Min-Max)	8 - 16°C	7 - 15°C	7 - 14°C	7 - 14°C	7 - 15°C
22-1-2015	000	19.0	07.6	RH (Min- Max)	45 - 70%	65 - 82%	65 - 88%	55 - 85%	50 - 75%

Gangtok				East Sikkim Forecast					
				Day → Parameter ↓	Day 1	Day 2	Day 3	Day 4	Day 5
Date	Rainfall (mm)	Max. Temp (°C)	Min. Temp (°C)	Sky Condition	Partly Cloudy	Generally Cloudy	Generally Cloudy	Generally Cloudy	Partly Cloudy
				Rainfall	No rain	No rain	Very Light	No rain	No rain
20-1-2015	000	15.0	05.1	Wind (Km/Hr) (Speed/ Dir)	3(NW)	3(WNW)	2(WNW)	2(SE)	2(SSE)
21-1-2015	000	16.0	06.3	Temperature (Min-Max)	6 - 13°C	6 - 13°C	6 - 12°C	6 - 12°C	6 - 13°C
22-1-2015	000	15.0	06.6	RH (Min- Max)	45 - 52%	55 - 78%	65 - 88%	55 - 75%	50 - 65%

Namthang				South Sikkim Forecast					
				Day → Parameter ↓	Day 1	Day 2	Day 3	Day 4	Day 5
Date	Rainfall (mm)	Max. Temp (°C)	Min. Temp (°C)	Sky Condition	Partly Cloudy	Generally Cloudy	Generally Cloudy	Generally Cloudy	Partly Cloudy
				Rainfall	No rain	No rain	Very Light	No rain	No rain
20-1-2015	000	17.0	06.0	Wind (Km/Hr) (Speed/ Dir)	3(WNW)	3(WNW)	3(W)	3(SSE)	2(S)
21-1-2015	000	17.0	05.5	Temperature (Min-Max)	7 - 17°C	7 - 16°C	7 - 15°C	7 - 15°C	6 - 16°C
22-1-2015	000	18.0	05.8	RH (Min- Max)	47 - 65%	60 - 78%	65 - 85%	60 - 75%	42 - 60%



Gyalshing (AWS)				West Sikkim Forecast					
				Day → Parameter ↓	Day 1	Day 2	Day 3	Day 4	Day 5
Date	Rainfall (mm)	Max. Temp (°C)	Min. Temp (°C)	Sky Condition	Partly Cloudy	Generally Cloudy	Generally Cloudy	Generally Cloudy	Generally Cloudy
				Rainfall	No rain	No rain	Very Light	No rain	No rain
20-1-2015	000	17.2	04.9	Wind (Km/Hr) (Speed/ Dir)	2(W)	3(W)	3(WSW)	2(SW)	2(WSW)
21-1-2015	000	18.4	06.1	Temperature (Min-Max)	6 - 14°C	6 - 13°C	6 - 12°C	6 - 13°C	5 - 14°C
22-1-2015	N/A	N/A	N/A	RH (Min- Max)	45 - 60%	57 - 80%	65 - 88%	60 - 75%	40 - 57%






## Part II




### AGRO-METEOREOLOGICAL ADVISORIES

#### General Advisories for all the crops

- ❖ Conservation of soil moisture through locally available biomass mulching in all the crops.
- ❖ Preventive spray and soil drenching with copper oxychloride @2.5 g/l of water at weekly intervals.
- ❖ Spraying of plant protection biopesticides in the evening.
- ❖ Sowing/transplanting of late *Rabi* vegetable crops like cole crops, pea, leafy vegetable *etc.*
- ❖ Utilization of harvested water stored in various structures like *Jalkund* is recommended through drip and sprinkler irrigation system for cultivation of *Rabi* crops.
- ❖ Incorporate organic sources of nutrients (FYM, Vermicompost, Poultry manure, Pig manure, Goat/ Sheep manure, Mixed compost, Neem cake *etc.*) in to the soil for cultivation of all *Rabi* crops.

Name of the crop/Animal	Stage	Pest/ Disease	Agro-Met Advisories
<b>Crops</b>			
Rapeseed and mustard	Sowing / Vegetative / Flowering stage	White rust 	<ul style="list-style-type: none"> <li>❖ Thinning to maintain row to row and plant to plant spacing of 30x10 cm, respectively.</li> <li>❖ Mulching with locally available bio resources is recommended.</li> <li>❖ One irrigation at late vegetative/ flowering stage.</li> <li>❖ Remove the infected inflorescence.</li> </ul>
Buckwheat	Flowering / grain filling		<ul style="list-style-type: none"> <li>❖ Regular monitoring of crop.</li> </ul>
Garden pea	Sowing/ vegetative/ flowering/ harvesting	Rust 	<ul style="list-style-type: none"> <li>❖ Sowing of late pea to be completed at the earliest.</li> <li>❖ Mulching with locally available biomass after emergence is recommended.</li> <li>❖ Pod harvesting should be done</li> </ul>

		 <p>● Powdery mildew Disease</p>  	<p>carefully to avoid plant damage.</p> <ul style="list-style-type: none"> <li>◆ Preventive spray with 0.25% wettable sulphur for the management of rust and powdery mildew.</li> </ul>
Large cardamom	Harvesting		<ul style="list-style-type: none"> <li>◆ Removal and burying of blight infected leaves.</li> <li>◆ Application of 500g vermicompost / 2kg well decomposed FYM per clump is recommended.</li> <li>◆ Two irrigations in a month are recommended.</li> <li>◆ Field sanitation and removal of unproductive tillers.</li> </ul>
Ginger	Storage		<ul style="list-style-type: none"> <li>◆ Harvested rhizome should be dried for two weeks under shade condition and stored in cool and dry place for seed material.</li> </ul>
Cole crops	Transplanting / Vegetative/ Harvesting	<p>● Damping off</p>  <p>● Club root</p> 	<ul style="list-style-type: none"> <li>◆ Transplanting of seedlings should be done immediately.</li> <li>◆ Soil application of <i>Trichoderma viride</i>/ <i>Pseudomonas fluorescens</i> @ 2.5 kg mixed with 50kg well decomposed FYM for 1 ha.</li> <li>◆ Drenching with copper oxychloride @ 0.25 % or Bordeaux mixture @ 1% at 10 days interval for the management of damping off and root rot.</li> <li>◆ Removal of club root infected plant and drenching with copper</li> </ul>

			<p>oxychloride @ 0.25 % or Bordeaux mixture @ 1%.</p> <ul style="list-style-type: none"> <li>◆ Application of Neem cake/ mustard oil cake @ 50kg/1000sqm.</li> <li>◆ Drenching of plant with mixture of water, cow urine and Neem oil 8 litre, 2 litre and 50 ml, respectively at weekly interval to avoid red ant and cut worms.</li> <li>◆ Earthing up for early transplanted crop is recommended.</li> <li>◆ Over watering should be avoided.</li> </ul>
Tomato	Fruit setting/ harvesting	<p>● Late blight of tomato</p>  	<ul style="list-style-type: none"> <li>◆ Watering should be done at the base of the plant.</li> <li>◆ Removal of diseased leaves and branches and weekly spraying of copper oxychloride @ 0.25% for the management of late blight disease.</li> </ul>
Potato	Planting/ vegetative	<p>● Late blight of potato</p> 	<ul style="list-style-type: none"> <li>◆ Kufri Jyoti, K. Giriraj, K. Sheetman, K. Badshah are recommended varieties.</li> <li>◆ Tubers with two eyes, weighing 40-50 g are ideal for planting.</li> <li>◆ Ridge to ridge spacing of 45 cm and plant to plant distance of 30 cm has to be maintained.</li> <li>◆ FYM @ 10-15 t/ha and Neem cake 500 kg/ ha is recommended.</li> <li>◆ Removal of diseased leaves and branches and weekly spraying of copper oxychloride @ 0.25% for the management of late blight disease.</li> </ul>



Sikkim Mandarin	Harvesting/ Storage		<ul style="list-style-type: none"> <li>◆ Pluck the fruit along with the twig to avoid injury.</li> <li>◆ Harvesting to be done carefully to avoid breakage of productive branches.</li> <li>◆ Fruit can be stored on trees for delayed harvesting.</li> <li>◆ Collect fallen fruits and destroy to prevent further multiplication of fruit flies.</li> <li>◆ Packing of graded fruits in corrugated fibre boxes cushioned with dry paddy straw to reduce post harvest loss.</li> </ul>
Sikkim Mandarin	Harvesting/ Storage		<ul style="list-style-type: none"> <li>◆ Pluck the fruit along with the twig to avoid injury.</li> <li>◆ Harvesting to be done carefully to avoid breakage of productive branches.</li> <li>◆ Fruit can be stored on trees for delayed harvesting.</li> <li>◆ Collect fallen fruits and destroy to prevent further multiplication of fruit flies.</li> <li>◆ Packing of graded fruits in corrugated fibre boxes cushioned with dry paddy straw to reduce post harvest loss.</li> </ul>
Kiwi fruit	Training /Pruning		<ul style="list-style-type: none"> <li>◆ Dormant kiwi fruit plant should be pruned to give proper shape to the vine.</li> </ul>

### ***Animal Sciences***

Tibetan Sheep	Sheared sheep		<ul style="list-style-type: none"> <li>◆ Provide winter shelter for lambs.</li> </ul>
Yak	Pregnancy	Weight gain	<ul style="list-style-type: none"> <li>◆ Pregnancy diagnosis is recommended.</li> <li>◆ Feeding of concentrate feed along with mineral mixture and salt.</li> <li>◆ Provide winter shelter for calves.</li> </ul>
Cattle, Sheep and Goat	All stages		<ul style="list-style-type: none"> <li>◆ 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.</li> <li>◆ Feeding of colostrums within 2 hrs of birth.</li> <li>◆ Feeding of concentrate feed along</li> </ul>

			<p>with jaggery, mineral mixture and salt.</p> <ul style="list-style-type: none"> <li>◆ De-worming with Fenbendazole @ 10 mg / kg body weight.</li> </ul>
Poultry	All stages	High humidity	<ul style="list-style-type: none"> <li>◆ Frequent raking and liming of deep litter materials.</li> <li>◆ Inclusion of turmeric powder @ 10g/kg feed for prevention of coccidiosis.</li> <li>◆ Maintenance of brooder temperature for chicks with the help of electrical bulbs.</li> <li>◆ Ranikhet vaccination at 5<sup>th</sup> day and at 30<sup>th</sup> day of age.</li> </ul>
Pig	All stages		<ul style="list-style-type: none"> <li>◆ Keep floor dry to avoid skin diseases.</li> <li>◆ De-worming with Fenbendazole @ 10 mg / kg body weight.</li> </ul>