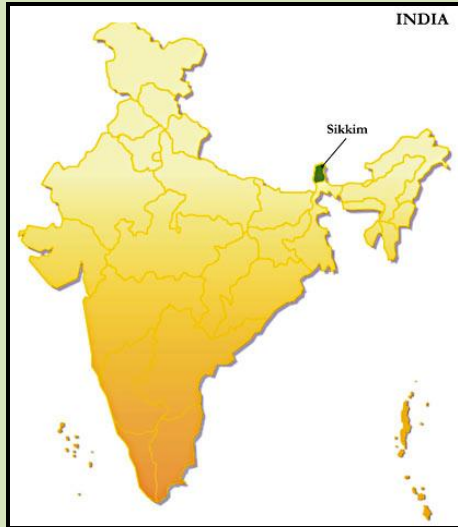




# STATE COMPOSITE AGRO-MET ADVISORY BULLETIN FOR THE STATE OF SIKKIM PERIOD: 23<sup>RD</sup> MAY TO 25<sup>TH</sup> MAY'2017



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



**ISSUED ON TUESDAY 23<sup>RD</sup> MAY'2017**

## **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

Mangan (PTO)				North Sikkim Forecast					
Date	Rainfall (mm)	Max. Temp (°C)	Min. Temp (°C)	Day → Parameter ↓	Day 1	Day 2	Day 3	Day 4	Day 5
				Sky Condition	Generally Cloudy	Generally Cloudy	Generally Cloudy	Generally Cloudy	Generally Cloudy
19-5-2017	014	24.3	13.2	Rainfall	Light	Light	Light	Light	Moderate
20-5-2017	010	25.2	14.3	Wind (Speed/ Dir)	3Km/Hr (SSW)	2Km/Hr (E)	2Km/Hr (SSE)	2Km/Hr (S)	3Km/Hr (S)
21-5-2017	000	25.3	15.3	Temperature (Min-Max)	15 - 25°C	15 - 24°C	15 - 25°C	15 - 24°C	15 - 24°C
22-5-2017	016	25.5	15.4	RH (Min-Max)	62 - 87%	63 - 88%	66 - 90%	68 - 91%	66 - 88%

Gangtok				East Sikkim Forecast					
Date	Rainfall (mm)	Max. Temp (°C)	Min. Temp (°C)	Day → Parameter ↓	Day 1	Day 2	Day 3	Day 4	Day 5
				Sky Condition	Generally Cloudy	Generally Cloudy	Generally Cloudy	Generally Cloudy	Generally Cloudy
19-5-2017	013	21.6	15.7	Rainfall	Light	Light	Light	Light	Light
20-5-2017	011	22.8	15.6	Wind (Speed/ Dir)	3Km/Hr (E)	2Km/Hr (ENE)	2Km/Hr (E)	3Km/Hr (ESE)	3Km/Hr (SSW)
21-5-2017	059	22.8	15.2	Temperature (Min-Max)	16 - 23°C	16 - 22°C	15 - 22°C	15 - 22°C	16 - 21°C
22-5-2017	023	24.5	15.0	RH (Min-Max)	67 - 90%	69 - 91%	71 - 91%	74 - 93%	70 - 90%

<b>Namthang</b>				<b>South Sikkim Forecast</b>					
Date	Rainfall (mm)	Max. Temp (°C)	Min. Temp (°C)	Day → Parameter ↓	Day 1	Day 2	Day 3	Day 4	Day 5
				Sky Condition	Generally Cloudy	Generally Cloudy	Generally Cloudy	Generally Cloudy	Generally Cloudy
19-5-2017	000	27.0	16.0	Rainfall	Very Light	Light	Light	Light	Light
20-5-2017	000	27.5	18.5	Wind (Speed/ Dir)	2Km/Hr (ESE)	3Km/Hr (ENE)	3Km/Hr (ESE)	2Km/Hr (ESE)	2Km/Hr (S)
21-5-2017	007	27.0	19.0	Temperature (Min-Max)	19 - 26°C	19 - 25°C	18 - 25°C	18 - 25°C	19 - 24°C
22-5-2017	000	24.5	18.5	RH (Min-Max)	64 - 88%	66 - 89%	69 - 90%	69 - 92%	65 - 90%


<b>Gyalshing (AWS)</b>				<b>West Sikkim Forecast</b>					
Date	Rainfall (mm)	Max. Temp (°C)	Min. Temp (°C)	Day → Parameter ↓	Day 1	Day 2	Day 3	Day 4	Day 5
				Sky Condition	Generally Cloudy	Generally Cloudy	Generally Cloudy	Generally Cloudy	Generally Cloudy
19-5-2017	N/A	N/A	N/A	Rainfall	Light	Light	Light	Light	Light
20-5-2017	N/A	N/A	N/A	Wind (Speed/ Dir)	2Km/Hr (SE)	2Km/Hr (NE)	3Km/Hr (ESE)	3Km/Hr (E)	2Km/Hr (ESE)
21-5-2017	N/A	N/A	N/A	Temperature (Min-Max)	17 - 24°C	17 - 23°C	16 - 23°C	16 - 23°C	17 - 23°C
22-5-2017	N/A	N/A	N/A	RH (Min-Max)	64 - 88%	66 - 90%	67 - 91%	69 - 92%	66 - 89%


## Part II




### AGRO-METEOROLOGICAL ADVISORIES

#### General Advisories for all the crops/ livestock

- ☘ Spraying of plant protection bio-pesticides on bright sunny day for insect and disease management is recommended.
- ☘ Vermicompost pits should be covered with gunny bags / paddy straw/ dry forest litter to regulate the temperature.
- ☘ Avoid feeding of damp and foul smelling feed to all livestock and poultry.
- ☘ De-worming with Fenbendazole @ 10 mg / kg body weight.
- ☘ Protect animals from rain and thunders by providing protective cover/ housing.
- ☘ Vaccination of the cattle, goat, yak and sheep should be done against FMD, HS and BQ.

Name of the crop/Animal	Stage	Pest/ Disease	Agro-Met Advisories
<b>Crops</b>			
Maize	Knee High stage		<ul style="list-style-type: none"><li>◆ Hand weeding should be done after 45 days of sowing.</li><li>◆ Regular monitoring for insect-pest and collection and destruction should be done.</li><li>◆ For management of Army worm/ stem borer spray spinosad @ 0.3 ml/litre.</li><li>◆ Proper drainage should be ensured.</li></ul>
Okra	Vegetative growth		<ul style="list-style-type: none"><li>◆ Hand weeding should be done after 45 days of</li></ul>

			<p>sowing.</p> <ul style="list-style-type: none"> <li>◆ Proper drainage should be ensured.</li> </ul>
Cucurbits	Transplanting/ vegetative growth		<ul style="list-style-type: none"> <li>◆ Bed should be prepared to a fine tilth by mixing well decomposed FYM @ 2 kg/m<sup>2</sup> and vermicompost @ 500 g/m<sup>2</sup> incubated with 5-10 % <i>Trichoderma viride</i> for management of soil borne diseases.</li> <li>◆ About 15-20 cm (25-30 days) seedlings should be transplanted in small pits at spacing of 100 cm x 100 cm.</li> <li>◆ For management of semi looper spray spinosad @ 0.3 ml/litre.</li> <li>◆ Proper drainage should be ensured.</li> </ul>
Tomato/ Red cherry pepper	vegetative growth		<ul style="list-style-type: none"> <li>◆ Proper drainage should be ensured.</li> <li>◆ Regular monitoring of field for blight incidence.</li> <li>◆ Preventive spray of copper oxychloride @ 2 g/ litre.</li> <li>◆ For management of cut worm in cherry pepper spray neem based bio pesticide @ 7 ml/litre.</li> <li>◆ Plant staking should be done with bamboo stick/ plastic string.</li> </ul>

Large cardamom	Flowering		<ul style="list-style-type: none"> <li>◆ Manuring with FYM mixed with bio fertilizer @ 2 kg/clump is recommended.</li> <li>◆ Regular weeding should be done.</li> <li>◆ Regular monitoring for pest and disease incidence.</li> <li>◆ Shade management with the proper lopping of trees.</li> </ul>
Ginger/ Turmeric	Vegetative growth		<ul style="list-style-type: none"> <li>◆ Forest litter @ 1 kg/ sqm should be applied as mulch material.</li> <li>◆ Proper drainage should be ensured.</li> </ul>
Sikkim Mandarin	Fruit set		<ul style="list-style-type: none"> <li>◆ Proper drainage should be ensured.</li> <li>◆ Intercropping of ginger, turmeric and maize should be avoided.</li> <li>◆ Preventive spray of copper oxychloride @ 2 g/ litre and neem formulations @ 5 ml/litre for disease and pest management, respectively.</li> </ul>
Kiwi fruit	Flowering/ fruit set		<ul style="list-style-type: none"> <li>◆ Mounting of hail net/ Agro shade net 50% on the trees to avoid plant damage from hails /heavy rainfall.</li> <li>◆ Hand pollination should be done for proper fruit set.</li> <li>◆ Proper drainage should be ensured.</li> </ul>

Tibetan Sheep			<ul style="list-style-type: none"> <li>◆ Feeding of 200 g concentrate feed along with mineral mixture and salt.</li> <li>◆ Shearing of sheep should be ensured before onset of heavy rainfall.</li> </ul>
Yak			<ul style="list-style-type: none"> <li>◆ Trimming of coarse fiber should be ensured before onset of heavy rainfall.</li> </ul>
Cattle, Sheep and Goat			<ul style="list-style-type: none"> <li>◆ Farmers are advised to look for heat sign especially during early morning or late evening and ensure breeding of the dairy cattle after 12 hr of observation of heat.</li> <li>◆ Breeding of the sheep/goat should be done after 24-30 hr of observation of heat.</li> <li>◆ Feeding of concentrate feed along with jaggery, mineral mixture and salt.</li> <li>◆ Periodic application of fly repellents and/or netting of dung pit are recommended.</li> </ul>
Cattle			<ul style="list-style-type: none"> <li>◆ Balanced feeding of dairy animals @ 3 kg / cattle as maintenance and @ 1 kg /2.5 liter milk production as production ration over and above the maintenance ration.</li> <li>◆ Allow calf suckling immediately after parturition.</li> <li>◆ Full hand milking should be practiced.</li> </ul>



			<ul style="list-style-type: none"> <li>◆ Frequent incomplete milking at interval of 4hrs should be practiced after parturition for minimum 1 week. Afterwards complete milking in a day is recommended.</li> </ul>
Poultry		Coccidiosis , Ranikhet disease	<ul style="list-style-type: none"> <li>◆ 16 hrs of light (natural and electrical) should be provided to adult birds for optimum egg production.</li> <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 for initial one month.</li> <li>◆ Vaccinate the chicks against ND / RD at 5- 7 day and at 30<sup>th</sup> day of age.</li> <li>◆ Calcium/shell grit and multi vitamin supplementation is strongly recommended to optimize egg production.</li> <li>◆ Spraying of ectoparasiticides viz.,deltamethrin/cypermethrin @ 1% v/v in water.</li> </ul>
Pig	All stages	Swine fever	<ul style="list-style-type: none"> <li>◆ Keep floor dry to avoid skin diseases.</li> <li>◆ Weaning is recommended at the age of 8 weeks for crossbreds and 10 weeks for</li> </ul>



indigenous pigs.

- ◆ Swine fever vaccine at the age of 8-10 week is recommended.
- ◆ Critical heat detection in early morning and late evening is recommended.
- ◆ Feed 5-10% green fodder of their diet.

**Agro-Met Advisory member of ICAR-NOFRI, Tadong, Sikkim**

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3. Dr. Raghavendra Singh	Senior Scientist	Agronomy
4. Dr. Rafiqul Islam	Senior Scientist	Animal Reproduction
5. Dr. Matber Singh	Scientist, SS	Agro forestry
6. Dr. Brijesh Kumar	Scientist	Animal Reproduction
7. Dr. Shweta Singh	Scientist	Plant Pathology
8. Dr. Chandramani Raj	Scientist	Plant Pathology
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