# STATE COMPOSITE AGRO-MET ADVISORY BULLETIN FOR THE STATE OF SIKKIM PERIOD: 11<sup>TH</sup> AUGUST'2015 to 13<sup>TH</sup> AUGUST'2015

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





#### ISSUED ON TUESDAY 11TH AUGUST'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 (PTO)				North Sikkim Forecast					
Rainfall		Max. Temp M	Min. Temp	Day → Parameter↓	Day 1	Day 2	Day 3	Day 4	Day 5
Date	(mm)	(°C)	(°C)	Sky Condition	Generally Cloudy	Generally Cloudy	Generally Cloudy	Generally Cloudy	Generally Cloudy
7/8/2015	070	25.1	16.1	Rainfall	Light	Moderate	Light	Moderate	Moderate
8/8/2015	000	27.3	16.2	Wind (Speed/ Dir)	3Km/Hr (SSW)	3Km/Hr (S)	2Km/Hr (SW)	2Km/Hr (SSW)	3Km/Hr (SW)
9/8/2015	003	30.0	17.4	Temperature (Min-Max)	19 - 31°C	20 - 30°C	20 - 31°C	20 - 31°C	21 - 30°C
10/8/2015	000	32.1	18.5	RH (Min-Max)	72 - 90%	74 - 91%	71 - 90%	74 - 91%	75 - 92%

Gangtok			East Sikkim Forecast						
Data	Rainfall Max. Temp		emp   Min. Temp	Day → Parameter↓	Day 1	Day 2	Day 3	Day 4	Day 5
Date	(mm)	(°C)	(°C)	Sky Condition	Generally Cloudy	Generally Cloudy	Generally Cloudy	Generally Cloudy	Generally Cloudy
7/8/2015	017	21.9	17.2	Rainfall	Moderate	Moderate	Light	Moderate	Moderate
8/8/2015	000	22.2	17.8	Wind (Speed/ Dir)	4Km/Hr (S)	4Km/Hr (SE)	3Km/Hr (SE)	3Km/Hr (ESE)	3Km/Hr (SSE)
9/8/2015	003	24.3	19.1	Temperature (Min-Max)	18 - 25°C	18 - 24°C	18 - 24°C	18 - 24°C	18 - 23°C
10/8/2015	004	24.4	19.0	RH (Min-Max)	80 - 93%	82 - 90%	80 - 89%	83 - 91%	85 - 95%

	Namthang				South Sikkim Forecast						
Rainfall		Max. Temp	Min. Temp	Day → Parameter↓	Day 1	Day 2	Day 3	Day 4	Day 5		
Date	(mm)	(°C)	(°C)	Sky Condition	Generally Cloudy	Generally Cloudy	Generally Cloudy	Generally Cloudy	Generally Cloudy		
7/8/2015	004	27.0	20.0	Rainfall	Moderate	Light	Light	Moderate	Moderate		
8/8/2015	000	29.5	21.0	Wind (Speed/ Dir)	3Km/Hr (S)	3Km/Hr (SE)	2Km/Hr (SSE)	2Km/Hr (SE)	3Km/Hr (S)		
9/8/2015	000	30.0	21.5	Temperature (Min-Max)	19 - 29°C	19 - 29°C	20 - 30°C	20 - 30°C	20 - 29°C		
10/8/2015	000	29.5	22.0	RH (Min-Max)	75 - 89%	73 - 89%	70 - 88%	75 - 90%	75 - 92%		

<b>Gyalshing (AWS)</b>			West Sikkim Forecast						
Data	Rainfall	Rainfall Max. Temp		Day → Parameter↓	Day 1	Day 2	Day 3	Day 4	Day 5
Date	(mm)	(°C)	(°C)	Sky Condition	Generally Cloudy	Generally Cloudy	Generally Cloudy	Generally Cloudy	Generally Cloudy
7/8/2015	013	25.0	17.4	Rainfall	Moderate	Moderate	Light	Moderate	Moderate
8/8/2015	001	24.7	18.0	Wind (Speed/ Dir)	3Km/Hr (S)	3Km/Hr (SSE)	2Km/Hr (S)	3Km/Hr (SSE)	2Km/Hr (SW)
9/8/2015	003	27.4	18.1	Temperature (Min-Max)	18 - 27°C	18 - 28°C	18 - 28°C	17 - 27°C	17 - 26°C
10/8/2015	000	27.8	19.1	RH (Min-Max)	70 - 90%	78 - 91%	80 - 91%	86 - 92%	84 - 95%

## Part II

### AGRO-METEREOLOGICAL ADVISORIES

- Preventive spray and soil drenching with copper oxychloride @2.5 g/l of water at 7-10 days intervals.
- Spraying of plant protection biopesticides on bright sunny day.
- Ensure proper drainage to avoid water logging especially for ginger, turmeric and kharif vegetables.
- Avoid feeding of damp and foul smelling feed to all livestock and poultry.
- De-worming with Fenbendazole @ 10 mg / kg body weight.

Name of the crop/Animal	Stage	Pest/ Disease	Agro-Met Advisories
Crops			
Maize	Harvesting		<ul> <li>Harvesting of maize for green cobs should be done in the morning hours.</li> <li>After harvest of green cobs, stover may be used as livestock fodder.</li> <li>Maintain proper drainage for maize crop being grown for grain and seed purpose.</li> </ul>
Rice	Direct sowing/ Transplanting		<ul> <li>Land should be prepared for direct sowing/transplanting.</li> <li>Proper maintenance of field channel and bunds are necessary to utilize the rain water.</li> <li>Well decomposed FYM/poultry manure/ vermicompost or other available organic sources of nutrients may be broadcast and incorporated by ploughing.</li> <li>Maintain proper spacing of 20 x 15 cm for conventional rice and 20 x 20 cm under modified SRI.</li> <li>Weeding should be done where crop is in vegetative stage (20-25 days after planting).</li> <li>Uprooted weeds may be left in</li> </ul>

				between rows to decompose in standing flood water. Weeds may be incorporated into the soil under SRI.
Rice bean	Vegetative stage	Blister Beetle  Legume pod borer	<b>*</b>	Proper staking should be done.  Collection and destruction of Blister beetles and spraying of Neem oil @3ml/lit should be done.
Soybean	Vegetative/ Flowering		<ul><li> </li><li> </li></ul>	Weeding should be done.  Maintain optimum plant population.
Black gram	Sowing/ vegetative	Blister Beetle	<ul><li> </li><li> </li><li> </li><li> </li></ul>	Well decomposed FYM @ 5 t/ha or vermicompost @ 1 t/ha and dolomite @ 2 t/ha should be incorporated in the soil at the time last ploughing.  To avoid water logging proper drainage should be maintained.  Before sowing seed should be inoculated with <i>Rhizobium</i> culture @ 20 g/kg seed.  Timely sowing on ridges is recommended.  Collection and destruction of Blister beetles and spraying of Neem oil @3ml/lit should be done.
Finger Millet	Transplanting/vegetative		<ul><li>*</li><li>*</li><li>*</li></ul>	Land should be prepared for raising of finger millet nursery /transplanting.  Proper maintenance of field channel and bunds are necessary to utilize the rain water.  Well decomposed FYM/poultry manure/ vermicompost or other available organic sources of nutrients may be broadcast and incorporated by ploughing.  First weeding should be done upto 30 days after transplanting.  Maintain optimum plant population (20x15cm) for higher yield.

Tomato	Flowering/	Late Blight	<b>*</b>	Proper drainage should be maintained.
	fruiting		•	Removal of infected leaves/ plant and drenching/ spray with copper oxychloride @ 0.25 % or Bordeaux mixture @ 1%.  Harvesting of mature green tomato should be done for distant market and pinkish/ reddish for local market.
Gourds (Bottle/	Flowering/	Fruit fly	<b>*</b>	· r · - · · · · · · · · · · · · · ·
bitter/ sponge/	fruiting		<b>*</b>	Collection and destruction of infested
ridge)				fruit.  Installation of para pheromone trap
			~	(cue lure) @ 16-20 traps/ha.
			<b>\oint{\oint}</b>	Regular harvesting should be done to
				improve the yield.
Dalley chilli/	Flowering/	Fruit fly	<b></b>	Proper drainage should be maintained.
Red Cherry	fruiting		<b>*</b>	Collection and destruction of infested
pepper				fruit.
			<b>*</b>	Installation of para pheromone trap
				(cue lure) @ 16-20 traps/ha.  Regular harvesting should be done to
			Ť	improve the yield.
Large	Vegetative/		<b></b>	Planting of disease free sucker should
cardamom	floral bud			be done.
	formation			Apply well decomposed FYM @
				2kg/ vermicompost @ 200g and neem
				cake @ 150g per clump.  Removal and burying of blight
			~	Removal and burying of blight infected leaves.
			<b>\oint{\oint}</b>	Weeding/ removal of infected tillers
				should be done.
				Removal of infected leaves/ plant and
				spray with copper oxychloride @ 0.25
C:	X7	G C		%.
Ginger	Vegetative	Soft rot		Proper drainage should be maintained.  Weeding and second mulching is
			~	recommended.
			<b></b>	Removal of infected leaves/ plant and
				drenching/ spray with copper
				oxychloride @ 0.25 %.
Okra	Vegetative/		<b>*</b>	Proper drainage should be maintained.
	flowering			Regular weeding should be done and
				followed by earthing up.

Sikkim	Vegetative /	Scab	<b></b>	Proper drainage should be maintained
Mandarin	active fruit			to avoid water stagnation.
	growth	3	<b>*</b>	Basin should be weed free.
			<b>*</b>	Avoid FYM application near the tree
				trunk.
				To fertilize the crop, well decomposed
				FYM @ 10-20kg /plant should be
				applied in the basin of trees.
		Leaf miner		Removal of scab infected leaves and
				spray copper oxychloride @ 0.25 %.
		Jagg or		Spray of petroleum oil based agro
				spray @ 10ml/l for the management of
			_	aphid and leaf miner.
			~	Regular monitoring for trunk borer infestation.
		Aphid		infestation.
Kiwifruit	Vegetative /		<b></b>	Proper drainage should be maintained
	active fruit			to avoid water stagnation.
	growth			Basin should be weed free.
				Avoid FYM application near the tree
				trunk.
			<b></b>	To fertilize the crop, well decomposed
				FYM @ 10-20kg /plant should be
				applied in the basin of trees.
				Preventive spray of copper
				oxychloride @ 0.25 % and petroleum
				oil based agro spray @ 10 ml/l.
Animal Scien	ices			
Tibetan Sheep	Full wool grown			Shearing is recommended on bright
				sunny day.
				Spraying of ectoparasiticidal.
Yak	Full grown hair			6 6
			_	recommended.
			<b>*</b>	Feeding of concentrate feed along
				with mineral mixture and salt.
Cottle Cl	A 11 o4c		<b>*</b>	Spraying of ectoparasiticidal.
Cattle, Sheep	All stages			Chances of coming into estrus so farmers are advised to look for heat
and Goat				
				sign especially during early morning
				or late evening and ensure breeding

			of the animal after 12 hr of 1 <sup>st</sup> heat observe.  Feeding of colostrums within 2 hrs of birth.  Feeding of concentrate feed along with jaggery, mineral mixture and salt.  Periodic application of fly repellents and/ or netting of dung pit is recommended.
Poultry	All stages	Cocciodiosis	<ul> <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 cocciodiosis.</li> <li>Maintenance of brooder temperature for chicks with the help of electrical bulbs for initial one month.</li> <li>Ranikhet vaccination at 5<sup>th</sup> day and at 30<sup>th</sup> day of age.</li> <li>Calcium and multi vitamin supplementation is strongly recommended to optimize egg production.</li> </ul>
Pig	All stages	Swine fever	<ul> <li>Keep floor dry to avoid skin diseases.</li> <li>Swine fever vaccine at the age of 8-10 week is recommended.</li> <li>Critical heat detection in early morning and late evening is recommended.</li> </ul>